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PROJECT TEAM

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FOREWORD

The Indian Education Commission, 1964-66, was interested in an ordered preparation of syllabi for Classes I to X of our schools. The National Institute of Education undertook this task in collaboration with the Commission. The syllabi so prepared are being used by the National Institute of Education as the basis for its varied programmes. In order to make such syllabi quite effective, the syllabus for a subject was split into units corresponding to a specific topic or group of topics of study. The idea behind such splitting was to prepare instructional material separately for each such unit. The instructional materials prepared for such units are called Teaching Units. The Teaching Units, as actually prepared, deal both with the subject-matter, the manner of effective presentation of the subject-matter and the techniques to be adopted for evaluation. As such, it is believed that they are of value, not only to the teachers but to those engaged in the stupendous task of textbook writing.

These Teaching Units as originally prepared have now been carefully scrutinised and edited. It has now been felt that copies of such Units should be made available to as large an audience as possible after taking into account the reactions of several people who have seen them and reviewed them. Under the circumstances, they are being published and distributed to our Extension Services Centres, State Institutes of Education and other organisations.

It is sincerely believed that the users will forward to us their own reactions so that we could utilise the same in our future projects for preparing instructional materials.

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S.V.C. Aiyar
Director

I The Physical Features of Asia

I. OVERVIEW

Asia, which is the largest continent, has also more people than any other continent. But curiously enough, most of the people are found in four countries—China, India, Pakistan and Japan. This continent comprises of one-third of the land of the globe. It is four times as big as Europe. Asian countries like China, India and Iraq have been the cradles of the oldest civilizations. Founders of almost all the religions of the world were born in Asia.

Asia is often called the continent of extremes. It has the highest mountain and the highest plateau as well as the largest stretches of lowland in the world, it has the coldest as well as the hottest places, the wettest and the driest, the most thickly populated and the most thinly populated regions in the world. Unfortunately many of the countries of Asia had been under foreign yoke, but now after attaining freedom they are emerging out as developing countries.

II. SPECIFIC OBJECTIVES OF TEACHING

A. Acquisition of Knowledge

The pupil acquaints himself with

1. the extent and boundaries of Asia.
2. the physiographical features particularly the mountain system of Asia.
3. the drainage system of Asia, the names of peninsulas, islands, plateaus, etc
4. the meaning of the following items :
 - a) The land of White Elephants.
 - b) The land of the Rising Sun.
 - c) The island of Spices.
 - d) The Roof of the World.
 - e) Sorrow of China.

B. Development of Understanding

The pupil develops an understanding of the following major ideas :

1. Asia is a continent of contrasts,
2. The highest peaks of the world are associated with the newfold mountain system of Asia.
3. These mountain ranges enclose plateaus and basins.
4. A very large area of this continent does not drain out into the sea.
5. Asia is studded with large sized peninsulas.

C. Application of Knowledge

The pupil establishes the relationship between the physical features of Asia and

1. the means of communication in northern plains, in Central Asia, in the plains of India and China, in Western Asia, etc.
2. the distribution of population in the plains, mountain regions and plateaus of Asia.
3. the mountain passes and invasions in the past
4. the sites of towns and cities and ports of Asia.
5. the occupation of the people.

D. Development of Skills

The pupil

1. locates the different countries of Asia (only very important countries).
2. locates different peninsulas, islands, bays, sea ports, mountain ranges and rivers.
3. locates the physical features of Asia.
4. prepares a relief model of Asia (i) on ground or (ii) on cardboard, with plasticine.

E. Development of Attitudes

The pupil

1. appreciates the contrasts that Asia presents
2. realizes the need of interdependence of the people living in different physical environments.
3. has a sense of sympathy for the people living in difficult terrain.

- 4 appreciates the human endeavour, (a) to overcome the difficulties of terrain for example in Central and Western Asia, North Siberia, Japan, South-East Asia and Philippines, etc. (b) to harness various big rivers in different countries of Asia such as India, Japan and Iraq.

III. CONTENT

Asia is the largest of all the continents and comprises of nearly one-third of the land of the globe. With the exception of some of the islands of the East Indies, it is situated entirely in the Northern Hemisphere. It extends from the Arctic Ocean in the North to the Indian Ocean in the South and from the Ural Mountains in the West to the Pacific Ocean in the East. In latitude and longitude it extends from 11°S to about 78°N and 27°E to 170°W . The mainland of Asia is north of the equator though some parts of Indonesia extend south of the equator. A good part of Northern Asia lies within the Arctic circle. The Tropic of Cancer passes through India and South China. The 90°E meridian roughly runs through the centre of Asia.

Asia with an area of 45.3 million square kilometres is four times as big as Europe. It extends approximately from north to south by 8,500 kilometres and from west to east by 9,560 kilometres. In this continent, it is interesting to find that there are places which are as far as about 3,000 kilometres from the coast.

The population of Asia is 1,500 million and it is two-third of the world's population. It is to be noted that most of the people are found in three major countries namely China, India and Japan. The population of India which is about 500 millions, is one third of that of the total population of Asia.

Asia is a continent of peninsulas. It is studied practically on all sides with large sized peninsulas of Turkey, Arabia, Deccan, Malaya, Indo-China, Korea and Kamchatka. Even Europe may be considered a peninsula of the Eurasian land mass but because of its large size it is separately identified as a continent in its own right.

Asia is unique in several respects. Of all the continents it has the largest area of 45.3 million square kilometres and the biggest population. It has the highest peak, the Everest (8,848 metres) in the Himalayas and the lowest parts are the Dead Sea (500 metres) below the M. S. L. The hottest and the coldest places viz Jacobabad 50°C and Verkhoyansk (-50°C in winter), and the places with highest

rainfall (Cherapunjee, 1250 cm. per annum). The highest plateau of the world, the Pamir known as 'The Roof of the World' is about 5,000 metres above sea level

The great continent of Asia can be divided into five major physical divisions They are :

1. The Northern Lowlands.
2. The Central Mountainous barrier of young folded mountains and the plateaus which they enclose.
- 3 The old plateaus of the south.
- 4 The great river valleys.
- 5 The eastern Archipelago

The Northern Lowlands : These are bordered on the north by Arctic Ocean and on the south by fold mountains. These are the continuation of the European plain and extend from Ural Mountains and the Caspian Sea in the west to the Strait of Bearing in the east. These lowlands are broad in the west and become narrow as they proceed towards the east. In the north-east they are interrupted by mountains Altai, Yablonovyy and Stanovoy and the Central Siberian plateau between Yenisey and Lena. In the west it is truly a lowland, a vast river plain, only separated from the great European plain by the low range of Ural Mountains. In the south-west is an area of inland drainage, draining into the sea of Aral and Balkash lake. The greater part of these lowlands slopes towards the north and is drained by the Ob, Yenisey and Lena. These three great rivers are very long and very slow, for the slope of these lowlands to the Arctic Ocean is very gradual. The rivers flow towards the very cold north, and their lower courses remain frozen for many months of the year. When this happens the water from the upper courses cannot escape to the sea, but spreads over the land and forms great swamps.

The Central Mountainous Barrier of Young Folded Mountains and the Plateaus which they Enclose · This great area of young folded mountains runs across the continent from west to east. The whole system of mountains is connected with two knots—the Pamir and the Armenian. From the Pamir knot it branches off to the south-east of the Himalayan Range. It has some peaks which are the highest in the world such as the Mount Everest (8848 metres) and the Kanchenjunga (8598 metres) From the Himalayas, running roughly southwards

is another mountain range which passes through Burma as the Arakan Yoma and continues through the Andamans to Sumatra and Java and other islands of Indonesia. These folded mountains get out in the islands that festoon the eastern side of the mainland of Asia such as the Philippines, Japanese island and the Kurilas, etc

The east of the Parmir knot are the Karakoram and Kunlun ranges. The Mt. k2 (8611 metres) in the Karakoram is the second highest peak in the world. The plateau of Tibet lies between the Kunlun and the Himalayan ranges. It is one of the highest plateaus of the world (1500 metres average). A branch of Kunlun runs towards the east and north-east as the Altyn Tag range forming the Tsaidan Basin in between. Tien Shan Mountains branch off from the Parmirs in the north-eastern direction. The Tarim basin is enclosed by the Tien Shan and Altyn Tag ranges. This basin is mainly drained by river Tarim which rises in the Parmir and disappears around the swamps of Lopnor. This is an inland drainage area having no outlet to the sea.

To the north of Tien Shan range lies the Zungerian basin. This basin is bordered in the north by the Altai. To the east of Zunger basin lies the Plateau of Mongolia which also includes the Gobi desert. The Sayan Mountains run to the north of the Altai. To the north-east of this range extend the Yablonovyy and Stanovoy mountains which form the south-eastern fringe of the Siberian Plain.

To the west of Parmir knot there are two main ranges, one running south-west as the Sulaiman and Kirithar Mountains, and then along the coast of Iran as the Zagros. The other branch runs westwards as the Hindukush, and extends along the southern shores of the Caspian Sea, as the Elburz mountains. The Zagros and the Elburz mountains coverage in the west forming the Armenian knot further passing westwards as the Taurus and the Pontic ranges. The plateau of Iran lies between the Elburz and Zagros mountains. To the north of the Armenian knot is the Caucasus which forms the boundary between Europe and Asia between the Black and Caspian Seas.

Most of the great rivers of Asia rise in the Central mountains and break through the bordering ranges on their way to the Ocean and thus provide gaps some of which serve as passes.

The Old Plateaus of the South : There are three great masses built up of hard, old crystalline rocks

1. Arabia is a great plateau presenting a steep edge to the Red Sea on the west and sloping gradually to the north-east till it slopes off into the Tigris valley. The slope is very gradual and not much broken up, for the country is dry and there are very few rivers
2. The plateau of peninsular India slopes on the whole from west to east. The steep western edge we call the Western Ghats, the low eastern edge is the Eastern Ghats. This plateau is much cut off by rivers like the Mahanadi, the Godavari, the Krishna and Cauveri. The Ghats are fringed by narrow coastal plains called the western and eastern coastal plains of South India.
3. The plateau of Yunnan and Indo-China stretches from the Shan States in Burma eastwards. A long branch of old rock runs southwards in to the Malaya peninsula. This plateau is also much broken by rivers, such as the Salween, Menam and Mekong.

The Great River Valleys (Basins) and Plains : These are fertile areas of lowland with stretches of alluvial soil. They are

- (a) The Tigris and Euphrates Basin (Iraq).
- (b) The Indus, Ganges and Brahmaputra Basin (Pakistan and India).
- (c) The Irrawaddy, Salween Basin (Burma)
- (d) The Menam, Mekong Basin (Indo-China)
- (e) The Hwang Ho Basin and Yangtze Basin and Si-kiang Basin (China).

Rivers of Asia : Rivers of Asia can be divided into

- (a) Rivers draining into the Arctic Ocean
- (b) Rivers draining into the Indian Ocean.
- (c) Rivers draining into the Pacific Ocean.
- (d) The rivers of inland drainage.

The rivers draining into the Arctic Ocean are the Ob, Yenisey and the Lena of Siberia

The rivers draining into the Indian Ocean are the twin rivers of the Euphrates and the Tigris of Iran, the Indus, the Ganges the Brahmaputra of India and Irrawaddy of Burma.

The river draining into the Pacific Ocean are the Amur of Manchuria, the Hwang Ho, the Yangtze-kiang and the Si-kiang of China, and the Mekong of Indo-China

The rivers of the inland drainage are the river Jordan flowing into the Dead Sea.

The rivers of South Asia are usually very long and slow moving. Some of them such as the Indus, the Ganga and the Brahmaputra form deltas at their mouths. Many of the rivers overflow their banks and cause a great loss of life and property in the regions through which they flow. Hwang Ho in China and Kosi in Bihar are notorious in this respect.

The Eastern Archipelago : To the east and south-east of the mainland of Asia lies a chain of islands such as Java, Sumatra, Borneo, Celebes, New Guinea, Japanese islands and Kuriles, etc. They extend from the Alutians in the north to the Indonesian islands. The Indian islands of Andamans and Nicobar may be included in this chain.

IV. TEACHING HINTS

1. This lesson should be taught with the help of a physical map of Asia. If possible, a relief model may also be procured or improvised.
2. He may ask the students to find out the number of physical divisions after studying the physical map of Asia.
3. Instead of giving out the names of the mountains and rivers he should ask the pupils to read them from the physical map of Asia given in their atlas and ask some of them to point out in the wall map.
4. He should not be satisfied with giving the students only the names of the rivers and mountains but he should let the pupil know their direction and extent. In case of rivers he should ask them to find out their probable source and follow the course on the map.
5. He should help the pupils in preparing a relief model of Asia on ground. It may be taken up as a class project.
6. He should divide the class into a convenient number of groups. Each group should be allotted any one of the following assignments. These assignments should be then reported to the class.

Make a list of

1. rivers flowing into different oceans
2. rivers of inland drainage
3. mountain ranges east and west of the Parmur
4. the peninsulas
5. the islands
6. the plateaus
7. the bays and seas
7. He may ask the pupil to collect pictures showing physical features in different countries of Asia and prepare an album.
8. The pictures representing the following may be very useful .
 - i) Fuji yama
 - ii) Rivers rising in the Himalayas
 - iii) Mountain peaks of the Himalayas, Caucasus, etc.
 - iv) Passes through the Himalayas
 - v) Desert land of Arabia
 - vi) Plateau terrain of Central Asia.
9. If facilities for film projector are available, films may be obtained from the Department of Teaching Aids, Indraprastha Estate, New Delhi. The film catalogue of its film library may be obtained on request.

V. EVALUATION

Given below are some sample questions :

1. Compare the rivers draining into the Arctic Ocean with those flowing into the Indian Ocean with regard to :
 - a) The flow of water
 - b) Speed
 - c) Usefulness for navigation and irrigation.
2. How do the plateaus of Central Asia differ from those of Southern Asia ?
3. In the outline map of Asia show the physical divisions and say how one division differs from the other ?
4. Describe the different relief features that you would come across if you fly from Delhi to the mouth of the river Ganges ?

5. Name any three mountain ranges that branch off from Armenian knot ?
6. Name two rivers that do not flow into the ocean ?
7. Which plateau lies between the Kunlun and the Himalayas ?
8. Mention three important deltas of South-East Asia.
9. Mention four salt water lakes of Asia.
10. Mention three rivers that rise in Tibetan plateau and flow into the Pacific.
11. Give reasons for the following :
 - a) The rivers of Siberia are not very useful for navigation.
 - b) Central Asia has a vast area of inland drainage.
 - c) There are swamps in the lower course of the Ob.
 - d) The islands of South-east Asia are usually elongated.
 - e) The Pamir is called the roof of the world.
 - f) The sun rises in Japan earlier than it does in India.
 - g) The Hwang Ho is called the sorrow of China.
 - h) People of Japan build houses of light material.
12. Match the following to make correct pairs.

a) The highest peak	—	Verkhoyansk
b) The roof of the world	—	Korea
c) The coldest place	—	The Hwang Ho
d) A peninsula	—	The Mt. Everest
e) Sorrow of China	—	The Pamir
		The Ganga
		The Thar
13. Match the plateaus or basins given in column A with the pair of mountain ranges given in column B.

A

1. The plateau of Turkey
2. Tibetan plateau
3. Tarim basin
4. Plateau of Iran
5. Tsaidan

B

- The Himalayas and the Kunlun
- The Elburz and the Zagros
- The Kunlun and Altai range
- The Pontic and the Taurus
- The Altai range and the Tian Shan
- The Vindhya and Aravalli

14. Of the given geographical terms write those which are associated with the following :

Geographical terms—**island, valley, desert, delta, peak, plateau, peninsula.**

- a) Yunnan (.....)
- b) Java (.....)
- c) The Malaya (.....)
- d) The Gobi (.....)
- e) The Everest (.....)

Write the letter of the correct answer in the box provided at the end of each question.

15. The word knot for the Pamir region indicates that

- a) it has a very dissected relief.
- b) a large number of rivers drain off from this region.
- c) it is a very high isolated plateau.
- d) a large number of mountain ranges meet here.
- e) boundaries of many countries meet here.

16. The east to west extent of Asia is approximately

- a) 15,000 kms.
- b) 12,000 kms.
- c) 9,000 kms.
- d) 6,000 kms.
- e) 3,000 kms.

17. The continent of Asia extends from

- a) 10°S to 78°N
- b) 5°S to 78°N
- c) 0° to 78°N
- d) 5°N to 78°N
- e) 10°N to 78°N

18. Of the following physical features that one will not come across if one is able to fly straight from Delhi to Ankara is

- a) The Armenian knot
- b) The Caspian Sea
- c) The Sulaiman
- d) The Indus Valley
- e) The Krithar

19. The island which is closest to the mainland of Asia is

- a. Hokkaido
- b. Taiwan
- c. Java
- d. Nicobar
- e. Maldives



20. Of the following mountain ranges the one which is different from the other four in respect of alignment is

- a. The Himalayas
- b. The Kunlun
- c. The Karakorum
- d. The Pontic
- e. The Ural



21. Show on the outline map of Asia

- i) areas of inland drainage
- ii) land below sea level
- iii) land above 2000 metres
- iv) land above 5000 metres
- v) areas drained by Hwang Ho, Indus, Euphrates, Tigris, Yenesei and Mekong
- vi) areas draining to the Aral Seas, Lake Balkash
- vii) boundary line between the areas draining into the Indian and the Pacific oceans.
- viii) direction of the mountain systems of the Himalayas, the Zagros, Kunlun, the Yablonovyy.

Key

Q. No.	15.	— D
	16.	— C
	17.	— A
	18.	— E
	19.	— B
	20.	— E

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II. Population and Agricultural Resources of Asia

I. OVERVIEW

Asia covers one-third of the earth and includes two-thirds of its people. Asia is not just the biggest of all the continents but it is also the continent with greatest diversity. Much of the land in Asia is unattractive for human settlement. Despite the pressure of population, less than one tenth of the land is under cultivation. Much of the land in Asia is either too cold, or too dry, or too hilly, or too infertile to be fit for human settlement. In spite of all these handicaps Asia has very huge population. This has been possible because of some areas that have extremely favourable conditions for growing crops even two to three in a year. The most thickly populated parts of Asia are generally those that are agriculturally the best lands. Even the most important urban and industrialized centres are generally located in the areas that are agriculturally rich.

II. SPECIFIC OBJECTIVES OF TEACHING

A. Acquisition of Knowledge

- (a) The pupil recalls and recognises
 - 1. The areas of dense and sparse population in Asia
 - 2. The chief agricultural lands of Asia.
 - 3. The main crops grown in Asia.
 - 4. Types of the climates in Asia.
- (b) The pupil develops acquaintance with terms like dense population, sparse population, monsoon climate, fertility of soil, river basins, multiple cropping, subsistence agriculture, etc.

B. Development of Understanding

The pupil develops understanding of the following major ideas :

1. Asia is a big continent that supports more than half of the people of the world
2. The population distribution of Asia is very uneven but very closely related to agricultural resources as they are available from region to region.
3. Great farming areas lie in the great river valleys of the monsoon regions of South and South-East Asia.
4. Because of heavy population most of the cultivated land is devoted to subsistence farming.
5. Rice culture dominates especially where there is abundant water supply.
6. Despite the tremendous amount of labour involved, rice is cultivated because of its high yields per unit area.

C. Application of Knowledge

The pupil

1. tries to correlate the amount and distribution of rainfall at his place with agricultural operations and the effect of rainfall on the yield.
2. sees the relationship between intensive farming and increased production.
3. compares the development of agriculture in monsoon region with that of other parts of Asia.

D. Development of Skills

The pupil

1. interprets a dot map of Asia showing the distribution of population.
2. fills in an outline map the distribution of major crops.
3. prepares simple diagrams depicting the production of crops
4. ranks by colouring or by shading the intensity of population in various regions of Asia.

E. Development of Attitudes

1. In view of the general scarcity of grains the child develops an attitude to preserve food grain and avoid wastage of food.

2. The child develops a sense of appreciation regarding the role of nature in ensuring crop.
3. Population is a complex phenomenon and its growth or decrease are the result of factors such as geographical, social, political and technical, etc.

III. CONTENT

Asia being the largest continent has a larger population than any other continent. The population distribution of Asia is very uneven. The present pattern of population distribution is very complex. It ranges from desert areas, where hundreds of square kilometres are practically uninhabited, to such densely populated areas as the Kanto plain of Japan. Approximately half of the people of the earth dwell in South-Eastern Asia and on adjacent islands which comprises of less than 14% of the world's land area.

Areas of dense population in Asia

Many parts of Asia are densely settled because of fertile soils, much sunshine, long growing seasons, lack of diseases and pests and ample water for an intensive use of the land. In many parts of Asia the population is huge because of irrigation facilities.

Many countries in Asia such as India and Java are densely populated chiefly by virtue of the rainfall associated with the wet monsoon, the high temperatures throughout the year and the cultivation of two sets of crops, one planted in the dry season and the other in the wet season. All these factors enable to support millions of people in these lands. Most of Java supports more than 200 inhabitants per square kilometre, chiefly by continuous crop cultivation. Some of the more fertile lowlands support more than 625 people per square kilometre. Though the climate of Java is similar to that of Amazon valley, the island possesses many conditions conducive to dense settlement.

Its mountainous backbone consists principally of many volcanoes which have provided the materials for much of the productive soil of the island and its lowlands afford excellent conditions for many of the tropical and subtropical crops. China and Japan are some of the countries of Asia which contain the world's largest areas of dense settlement. In the fertile river and coastal plain regions of Japan and China, densities on land which are largely agricultural

reach 2000 per square kilometre. The land capable of supporting people under existing conditions is almost occupied in India and Pakistan but in South-East Asia there is an incomplete development of crop land. There is extreme crowding in the best lands of the river plains while large areas especially upland areas that could be brought into use with clearing, irrigation or transport development are now only sparsely populated. Indonesian islands other than Java are glaring example of this anomaly.

Areas of very sparse population in Asia

In contrast to densely populated areas of Asia there are areas which are nearly uninhabited. These areas as represented by the population map having less than 2 persons per square kilometre. Most of North-Western Siberia and central Asia, comes under this category. The central parts of Asia are covered with deserts and highlands. Other areas of very low population in Asia lie in South-West Asia in the deserts of Arabia and plateau of Iran and the Thar desert of India. These areas represent the least desirable lands for settlement and human advancement. These areas are unsuitable for human habitation because the growing season is too short to produce food crops and the natural forage is not suitable for most domesticated animals.

The mountain sections of central Asia have few inhabitants partly because of short growing season and partly because of rugged nature of land but chiefly because of an annual precipitation of less than 10 inches. Then there are areas having sparse population. These areas have 2 to 16 persons per square kilometre. In Asia these regions are represented by rugged or arid regions. Also included in the sparsely settled areas are some mountainous regions which have more people than might be expected. Most of the urban and the new industrial centres in Asia are generally located in rich agricultural lands. There are more cities in this climatic region than any other within the tropics. There are over 50 cities with 1,00,000 people in India. Most of the large cities of India are commercial centres, some derive additional importance from being provincial capitals, and others have become industrial centres. Similarly most of the industrial cities in China and Japan are located in the agricultural belts.

SOUTHERN ASIA

Agriculture in monsoon lands of Asia

The monsoon regions of Asia are one of the most thickly populated land of the world. The pressure of population stimulates a continual quest for food and the imprint of intensive agriculture is deeply imbedded in the land. The land receives little rest for the threat of famine makes farming an essential activity in dry as well as wet seasons. In China, India, Bangla Desh, Korea and Pakistan nearly 3/4th of the people are wholly or predominantly agriculturists and in Japan nearly one-half.

These regions are among the world's oldest agricultural areas and are farmed by the most intensive methods, an important factor in enabling them to support the dense population.

The people of the monsoon region of Asia are dominantly subsistence farmers whose destinies are directly related to the monsoons. The productivity and supporting capacity of any given area are determined by the amount and regularity of the rains brought by the summer winds. Great contrasts are found as illustrated by the differences between Bangla Desh and Pakistan. Bangla Desh has high rainfall and is a rich growing area with an average population density of nearly 500 per square kilometer. Pakistan is a wheat producing area which receives much less precipitation and supports an average of 50 persons per square kilometre. Asia is rich in its agricultural resources mainly because of its fertile river valleys. The rivers form large alluvial plains through which they flow. They bring much rich soil with them and spread in these valleys. Fertile soils, permanent water supply and long growing seasons, all are responsible for huge agricultural population in these valleys.

In some countries irrigation is very important like Iraq, India and Pakistan. Very large valley projects serving several purposes at a time have been taken up in recent years. Bhakra-Nangal is one of the biggest multi-purpose projects of Asia.

Throughout the agricultural lands of South and South-East Asia, great population densities cause farm holdings to be small, production from these small holdings provides the sole source of livelihood thus they must be farmed intensively. Where the water supply permits, two or even three crops a year are common. In Southern China the rainy season is of sufficient length to allow

production of two successive crops of rice. This multiple cropping greatly extends the supporting capacity of a farm holding

In India and Pakistan irrigation development has increased the cropping possibilities and added stability to agriculture in many sections where uncertainty and irregularity of rainfall restricts normal production.

Rice—the distinctive crop

Rice, the highest yielding is the favourite of these lands. It is the most distinct and most important product of intensive subsistence farming. In areas receiving over 100 cms. of rainfall, it is the main crop but where the rainfall is below 100 cms. rice can be grown only with irrigation. On the success or failure of this crop depends the welfare of hundreds of millions of people. In Japan rice fields occupy 53% of all crop land, in Burma nearly half and in China, India and the Philippines about 25%. Everywhere on irrigable deltas, flood plains, artificially built terraces and lowlands rice is the main crop. Dependable yields of rice are necessary in regions of such dense population as the humid lands of south-eastern Asia. With primitive tools, but with constant care and arduous labour, great production of rice is obtained to meet with the needs of the dense population of this region in Asia.

Though rice growing overshadows other agricultural interests in most parts of the monsoon lands, other crops such as wheat, Sorghum millets, barley, sugarcane, beans, pears, oilseeds, etc. play an important part in the farm economy.

Wheat is grown in the Soviet Union, China, Northern India, Pakistan and in other countries of Asia, millets are raised in semi-arid lands. For thousands of years the oriental farmer has extracted a living from the earth. By intensive, hand methods, fertilization, crop-rotation, interillage and double cropping he has done every thing to support the teeming millions of Asia.

IV. TEACHING HINTS

This unit may be taught with the help of maps of Asia. One map may show the population distribution and the other crop distribution over Asia. The teacher may then ask some such questions in which the pupil correlates and compares both the maps. Some of the questions may be :

- (1) Why are there more people in paddy growing areas ?

- (2) Why is it not possible for farmers in Asia to raise so much food as needed by them, even though relatively more people are farmers ?
- (3) What climatic conditions are best for growing rice ?
- (4) Why is most agriculture in Asia concentrated in the South-Eastern part of the Continent ?

There is also much scope for practical activity in this unit. Very useful work experiences can be provided for by .

- (1) Asking the pupils to prepare individual maps to show the distribution of chief crops.
- (2) Draw maps showing the distribution of population in Asia
- (3) Prepare a bar diagram to show the production of various food grains countrywise for the current year.
- (4) The teacher may arrange group discussion on
 - i) intensive type of agriculture in monsoon Asia
 - ii) Asia and population distribution.
- (5) Collect pictures from periodicals regarding agriculture in Asia
- (6) Making of a models of a typical farm house in Japan.
- (7) Collection of different grains grown in Asia, classifying them and add notes to them.

V. EVALUATION

- (1) Complete the sentences by choosing the correct answer from the alternatives given below :
 - a) The rice fields of Asia fall in the category of
 - (1) commercial agriculture
 - (2) commercial mixed farming
 - (3) subsistence farming
 - (4) plantation farming
 - b) Many parts of Asia are densely populated because—
 - (1) Those areas have fertile soils, ample water for an intensive use and long growing season.
 - (2) Those areas had a civilization of their own.
 - (3) Those areas ensure better longevity of life to the people.
 - (4) Those areas were the regions where people could afford extravagance.

c) The central parts of Asia are sparsely populated because—

- (1) They are covered with deserts and highland.
- (2) They have a scanty rainfall.
- (3) They experience very cold weather during winter.
- (4) They are centrally situated.

d) Most of the urban and new industrial centre in Asia are—

- (1) In the coastal regions.
- (2) In the interior of the regions.
- (3) On high mountain tops.
- (4) Generally located in rich agricultural lands.

II. Answer the following questions in 3 or 4 sentences :

- a) Name the thickly populated areas of Asia and account for their dense population.
- b) Account for the high density of population in monsoon lands of Asia.
- c) Why are the rice growing regions thickly populated ?
- d) Give the climatic factors favourable for rice cultivation
- e) What is a terraced farm and name the countries that practice the terraced farming ?

III. Describe in detail how the agricultural resources have influenced the distribution of population.

IV. Give reasons for the following

- 1) There has not been much increase in population in Europe of late in comparison to Asia.
- 2) Parts of Asia are sparsely populated
- 3) The intensity of agricultural production in Europe has risen in the recent years.

V. Prepare a sand table of Asia demonstrating the different agricultural regions and showing their subsidiary crops as small models in the same.

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III. Neighbouring Countries of India*

I. OVERVIEW

Modern scientific inventions have not only shortened the distance between different countries but also have made the nations feel that they are dependent upon one another, especially the neighbouring ones. Pakistan, Bangla Desh and Burma are not only our next door neighbours but they were once politically parts of India. Burma got separated in 1937, while Pakistan was the result of the partition of India in the year 1947. Pakistan included Bangla Desh which was known as East Pakistan. In 1971 Bangla Desh became an independent nation. There are no natural boundaries between India and Bangla Desh and India and Pakistan. To the north of India lies the country of Nepal which also does not have any natural boundary with India. These three countries share the religious and cultural heritage with us since times immemorial. Ceylon lies to the south of India separated only by the very narrow strait of Palk. She too has not only religious and cultural ties with India but is also a geographical extension of the Deccan beyond the narrow neck of the sea. Any significant event taking place in these countries will affect us one way or the other. A geographical study of these neighbouring countries—Pakistan, Nepal, Ceylon, Bangla Desh and Burma—will help us to understand them and maintain peace in this part of Asia. Needless to say, together with the union of India, they form what in geography is known as the "Sub-continent of India."

II. SPECIFIC OBJECTIVES OF TEACHING

A Acquisition of Knowledge

The pupil knows—

1. the location of these countries in the map of Asia.
2. the physical features and climatic conditions prevailing there.
3. the vegetation, agricultural produce and salient facts about the mode of life of the people in each of these countries.

*Separate Units will be prepared on Bangla Desh and Pakistan.

B. Development of Understanding

The pupil develops an understanding of the following major ideas and concepts :

1. The countries of Pakistan, Nepal, Ceylon, Bangia Desh and Burma together with the Union of India form the geographical unit, popularly known as the "Sub-continent of India."
2. The direction of the mountain ranges in Burma have affected not only the drainage system but also the means of transport
3. Though all these countries lie in the monsoon region yet they do not receive the same amount of rainfall, leading to differences in vegetation and agricultural produce
4. Dense population, lack of technological advancement and consequently less per capita production than in the west are the problems with which these countries are seriously faced
5. These countries gained independence very recently and thereafter are engaged in building up their economy.
6. Like us agriculture is the principal occupation in all our neighbour countries.

C. Application of Knowledge

The pupil—

1. identifies the major problems with which each neighbouring country is confronted.
2. establishes relationship between
 - (a) physical features and climate.
 - (b) physical features and the drainage system and means of communication.
 - (c) climate on one hand and vegetation and agricultural produce on the other
 - (d) geographical factors and occupations of the people.
3. infers about the types of industries that can be established in Burma, Nepal, Ceylon, Bangla Desh and Pakistan as the result of new technological development-localities.

D. Development of Skills

The pupil—

1. shades on the outline map of Asia the countries of Pakistan, Burma, Bangla Desh, Nepal and Ceylon.
2. shows the direction of mountains and rivers in the outline maps of the region
3. shows the summer and winter conditions
4. locates important towns and ports.
5. demarks the areas growing rice, wheat, tea, cotton, etc
6. prepares relief models of these countries

E. Development of Attitudes

The pupil—

1. sympathises with the inhabitants of these countries when faced with national calamities.
2. appreciates the efforts of people of these parts to overcome different difficulties in building up their economy.
3. appreciates how water resources are being harnessed for irrigation and generation of hydro-electric power in cooperation with neighbouring countries.

III. CONTENT**(A) Burma**

Burma is our neighbour on the east. She was once a province of India which became a separate country under the British Rule on 1st April, 1937. She became an independent sovereign state on 4th January 1948 and is called the Union of Burma. She is separated from India by the Arakanyoma which runs north and south along with other ranges which give direction to drainage and the means of transportation.

These mountain ranges are covered with tropical monsoon forests which contain world famous teak and are infested with elephants, many of whom have been trained to transport logs of wood from one place to another. No doubt this country is nick named as the 'Land of Elephants.'

This is the Asian country which produces rice much more than the requirement of her population, hence she is a happy country.

Thousands of years ago her people accepted Buddhism and since then its monastic system has dominated the life of the people who build temples of peculiar shape called Pagodas. This country is therefore also called a 'land of Pagodas.'

Extent and Size : Burma stretches from 9°N to 28°N and from 92°E to 101°E. The length of the country from north to south is 2000 kms. The broadest part of the country at about 21°N., is 950 kms east to west. The total area of the country is approximately 678500 sq. kms. It is bounded by India and Pakistan in the north-west. China in north and north-east, Laos and Thailand in the east and the Indian Ocean in the south and south-west.

Roughly half of Burma lies outside the tropics but the configuration of the country is such that the whole may be regarded as a tropical country.

- (1) The Arakan Yoma and other fold mountain ranges.
- (2) The central basin and the delta region.
- (3) The eastern plateau.

The Arakan Yoma forms the barrier between Burma and India. In the south-west of Arakan ranges is a narrow coastal plain drained by small rivers having fertile basins well suited to rice cultivation. Some of the peaks of the Arakan Yoma are very high, the highest being Mt Victoria (3053 metres).

Between the Arakan Yoma on the west and the Shan plateau in the east lies the basin of Irrawaddy and its great tributary the Chindwin. The Irrawaddy forms a wide delta in the south which is joined by the valley of the Sittang in the east. The central basin is the most important physical feature of the country. It is about 1000 kms long and 250 kms. broad. This basin is a very fertile plain formed by alluvial deposits. The Pegu Yoma, a low range of hills lies between the Irrawaddy and the Sittang. Here lies the extinct volcano of Mt. Papa in the Pegu Yoma. To the east of this basin lies the Shan Plateau which in fact is a part of the great Yunnan plateau averaging 900 metres in height. Its surface is much dissected and through it runs the deep, trough occupied by the river Salween. Southwards the plateau passes into the narrow Tennesarim region.

Climate : Burma, like India, enjoys the monsoon climate and has the same three seasons. Most of rain falls in the summer months from June to October. The coastal plain and the western slopes of the Arakan get the heaviest rainfall over 300 cms. Thus this region is hot and wet. The central basin in the rain shadow area, gets about 100 cms. Mandalay in the north of this basin gets 80 cm. of rainfall. Temperature here rises 31°C in April, but falls down to 21°C in December. This is the dry area of Burma. Rangoon in the south has 250 cms. of rainfall. Rangoon's average monthly temperature for April is 27°C and for December 24°C .

Natural Vegetation : The wide range of rainfall is responsible for a variety of vegetation. In areas of heavy rains (above 200 cms.) evergreen tropical forests occur. The Monsoon forests are found in the areas having a rainfall between 100 and 200 cms. The famous Burma Teak is obtained from these monsoon forests. In dry areas the vegetation consists of scrub. In the deltas are found tidal forests. Burma earns a good foreign exchange by selling teak to other countries.

Mineral Resources : On account of its varied geomorphology, Burma has a variety of minerals but the important ones are petroleum, lead and zinc. Main oil area is in the central and lower basin of Irrawaddy, Singu, Yanangyat, and Minbu being the important drilling centres. This oil is sent to the refinery of Syriam near Rangoon by pipelines and then exported. Some low quality of coal is mined in the Shan plateau and Chindwin basin. The Badwin mines in the plateau of Shan are famous for zinc, lead, copper and silver. Tin is mined at Toyoy in the Tensharim. Ruby and many other precious stones are obtained near Mogoke.

Agriculture : Land use for agriculture in Burma is limited—13% of the total area is under agriculture while, 34% is under forests. Most of the people of Burma are agriculturists. They practise agriculture in the valleys and the coastal plains. The methods are old and the buffalo is the most important animal used for ploughing. About two third of the cultivated area is under paddy, the most important crop. Most of the rice is grown in the deltas of the south and the Arakan coastal strip. In the central basin pulses, groundnuts, til, cotton, tobacco and maize are grown. Wheat is cultivated only on a small

scale, Tea plantations in Tenassarim and Arakan regions, and coconut and rubber plantations in the delta regions deserve special mention. The production of rice in Burma is more than her requirements. So Burma exports rice. Irrigation is practised in the deltaic and northern plains.

Industries : Industrially Burma is backward. Husking and polishing of rice is the most important industry. There are a number of saw mills. There are two petroleum refineries at Chauk and Syriam. It has some jute, cotton textile, cement and cigarette factories. The cottage industries are connected with the production of cotton and silk cloth, cigars, and china clay vessels. 50% of the industrial labour is engaged in rice industry.

Transport : Most of Burma has a rugged relief. Therefore the main transport routes are in the central and lower Irrawaddy valley. The railways run north and south along the Irrawaddy. There are about 30001 kms. of railroad. Roads also follow the valley routes. Burma is connected to India and China by roads. Irrawaddy and its tributaries serve as important waterways. Most of the internal trade of Burma is carried on by river transport.

Population and Cities : Burma is not thickly populated. It had a population of 19300000 (in 1960) and an average density of 28 persons per sq. km. The most thickly populated part is the delta, where the density is 150 people per sq. km. The mountain and plateau regions are sparsely populated. With less people and more production the people are happy and prosperous. They are fond of silk and flowers. The religion of most of the people is Buddhism and the land abounds in Pagodas, the most important being the Shwedegon Pagoda of Rangoon. Rangoon on the delta of the Irrawaddy is the most important city of the country. It handles 85% of the country's trade and exports timber, petroleum and other minerals. It is the capital and also most important industrial centre. Other cities are Akyale and Moulmeim. Mandalay on the Irrawaddy is the industrial and commercial centre of central Burma.

(B) Ceylon

Extent and Size : Ceylon is separated from India by a narrow sea, 35 km. wide known as the Palk Strait. There is a line of rocks and sand banks between

the Indian and Ceylon ends of the sea known as the Adams Bridge. It lies between the 5° and 9° North latitudes. The island is roughly 432 kms. long from north to south. The area of the country is 65610 sq. kms

Physical Features : The island consists of a central mass of mountains, surrounded by broad coastal plains. The central mountains rise to a height to 2550 m. (Pidurutalagala peak). The highest peak overlooks the hill station of Nuwara Eliya. The northern coast plain is almost flat. Of the rivers that radiate from the central mountains, the largest is the Mahaweli Ganga. The rivers are navigable in their lower reaches. The central mountains consist of old crystalline rocks as those of peninsular India. Along much of the coast are sand dunes. Behind these sand dunes are numerous lagoons. To the north there are many coral reefs.

Climate : Ceylon is a tropical country. Though she is quite close to the equator yet the heat is not oppressive, because of her insular position. The range of temperature is small. Temperature of Colombo ranges between 24°C and 26°C. The central highlands enjoy a cool climate throughout the year. Ceylon gets rain both from the south-west and north-east monsoons. The west and south-west coasts get heavy rains from the south-west monsoons during the months of May to October. While the north-east coast and the eastern slopes get rainfall from north-east monsoon during the months of November and December. The north-western and south-eastern parts remain comparatively dry throughout the year.

Natural Vegetation : The lower slopes of the mountains are covered with thick evergreen forests. Now they are gradually being cleared to give room to tea and rubber plantations. Eucalypts and ebony are important trees. One fifth of the land is covered with forests.

Agriculture : Agriculture is carried on in one fifth of the land area and the most important crop is paddy. This is grown in coastal plains and on small patches of land available in the central highlands. The other important crops are the plantation crops—such as the coconut, tea and rubber. Ceylon is also famous for spices such as cinnamon, cloves and cardamom. All along the sandy coasts coconut has been planted. Ceylon does not grow rice enough to

meet the requirement of the people, this deficiency is met with fish. The shallow gulf of Manar is famous for pearl fishing.

Minerals : Ceylon is known for sapphire which are obtained from the old rocks. Rubies and many other precious stones are also mined.

Industries : The manufactures on a large scale area are restricted to the preparation of agricultural products—tea, coconut, rubber and cocoa. Carving, weaving, basket making and gem cutting are some of the cottage industries. Modern industries connected with plywood, leather goods, cement and paper are coming up.

Transportation Most of the trade of the country is seaborne. Coastal shipping is important. The railways extend over 1000 kms. and connect Colombo with the towns of the central highlands and the north coast.

Population and Cities : Ceylon has a population of 10.5 millions, 85% of the population is rural. The south-western coastal plain is thickly populated. A large number of people here work as agricultural labourers in plantations. The majority of people are Buddhists though there are a number of Hindus and Muslims who have migrated to that country from India.

Colombo is the largest town and port. It exports coconut and its products, tea, species and rubber. It is also the capital of the country. Talaimarnar in the north-west is the port from where steamers go to Dhanuskodi daily, the nearest port on the Indian side. Trincomalee is the important port on the coast and is an important fishing centre.

(C) Nepal

Nepal is situated in the north of our country stretching for about 800 kms. along the Himalayas. Tibet (China) is to the north of this country. On all other sides it is bounded by India. Its area is 141400 sq kms. It is between 80° and 88°E longitudes and 26° and 30° north latitudes.

Physical Features · The great Himalayas cover almost nine-tenth part of the country. The highest peak, the Everest is on its northern boundary overlooking Tibet, Mt. Kanchenjunga, the third highest peak of the world is in its

north-eastern corner. A very large part of this region is under perpetual snow. Many rivers of India such as the Sarda, Ghaghra, the Gandak and the Kosi rise in Nepal. Some parts of Nepal adjoining U P. and Bihar are in the Terai. The main valley in this part is the valley of Kathmandu, 24 kms long 11 kms. wide. The name, Nepal is properly restricted to this valley meaning the country contained within the four passes. This valley is drained by the Bagmati, the Sapt, the Gandakis and the Karnali system.

Climate and Vegetation · Nepal has a climate ranging from the hot wet Terai in the south to the bitter cold of the north. Many peaks of the Himalayas are under perpetual snow. Kathmandu has an average January temperature of 10°C and that of July 24°C. Most of the rains in the valley fall from June to October by the south-west monsoons which blow there as easterly winds. The average rainfall of the valley is 50 cms. One third area of the country is under forests. Forests have a wide variety of trees ranging from monsoon forests of the Terai to the conifers of the high Himalayas. The southern forests yield valuable timber such as sal and shisham. Soft wood trees are little exploited. Forestry is an important occupation of the people. Medicinal herbs are grown on the northern slopes.

Agriculture and Other Resources : Agriculture is the main stay of the people living in the valleys where rice is the most important crop. Maize and millets are also grown. Cultivation of wheat is on a small scale. Nepal produces more rice than her people need. Therefore an exportable surplus is available. Terraced paddy cultivation is also practised. Jute, tobacco and paddy is also grown in the eastern part of the valley. Cattle are reared for milk and ghee is prepared for export. Hides are also exported.

Nepal is deficient in minerals. Salt peter is mined. At present emphasis is laid on the generation of hydro-electricity and five such schemes are being implemented to develop industries. Recently cigar, rayon, cotton textile, paper and other industries have been established. India is taking a keen interest in Nepal and helping it to develop her economy.

Population and Cities : Nepal has a population of 9.4 million, most of which professes Hinduism. The Gurkhas of this country are well built and stout.

though a little short statured. They belong to a martial race. The valley is thickly populated and here lies Kathmandu, the capital which has the famous *Pashupatinath* Temple.

IV. TEACHING HINTS

1. The neighbours may be identified with the help of a map. Boundaries common with India may be carefully traced.
2. Teaching may be problem based. Problems for the purpose may be drawn from current events. As far as possible problems related to tension between any two countries may be left out. It may, however, not be very easy to do in case of Pakistan.
3. Such cooperative projects as Kosi Scheme (India-Nepal) may be highlighted.
4. The route of the international highway passing through Pakistan, India and Burma may be traced.
5. Students may be guided to prepare group reports on different countries after reading literature available with them. They may be helped to correspond with cultural attaches of the High Commission of Ceylon and Embassies of Nepal and Burma.
6. Pictorial map depicting important centres of culture, agricultural and natural wealth, minerals, ports, etc. may be prepared as group project.
7. Exhibit may be prepared for class exhibition entitled "Our Neighbours and We". Pictures, maps, diagrams, specimen of handicrafts, etc., may be collected.
8. Fancy shows depicting life in different countries may be arranged.
9. Documentaries, educational films, filmstrips of different countries may be obtained from—
 - i. respective libraries of either the High Commission or Embassies
 - ii. film section of the Department of Teaching Aids (NCERT), New Delhi.
 - iii. film library, Education Expansion Department, Mahatma Gandhi Marg, Allahabad.

V. EVALUATION

1. Show the physical divisions of Ceylon, Burma and Nepal on the map and write or mark:
 - a. the names of the mountains and their direction.
 - b. the names of two highest peaks.
 - c. whether the mountains are fold or volcanic
 - d. the minerals that are found in these mountainous parts
 - e. the areas covered with jungles or grass.
 - f. the important rivers which rise in mountains.
 - g. the extent of navigability of rivers
 - h. the use to which they have been put, if any.
 - i. the ports that lie on their mouths.
2. Name the natural regions of Burma and describe main characteristics of each.
3. Name the main exports and imports of Ceylon mentioning the ports from which they are exported or imported. Show the hinter-land of each port
4. Match the following places with their countries:

A. Burma	Mandalay
B. Ceylon	Talamannar
C. Nepal	Totcorin
	Rangoon
	Birganj
	Kathmandu
	Kapilavastu
5. Match the following

Plateau	Kanchenjunga
	Zozla
	Shan

Peak

Mannar

Strait

Arakan Yoma

Mountain range

River

6. Complete the following statements by choosing a correct ending.

(i) Burma has been described as “the happiest land of Asia” because—

- A. their literacy percentage is far higher than elsewhere in South-East Asia.
- B. plenty of rice is grown.
- C. the natural scenery of the country is beautiful
- D. there is lack of population pressure.
- E. there are mines of precious stones.

(ii) The temperature of Ceylon is uniform throughout the year because—

- A. it has many mountain ranges.
- B. it is an island.
- C. it is close to mainland.
- D. it lies very close to the equator.
- E. both south-west and north-west monsoon bring rain.

7. Give reasons for the following :

- (i) Burma is a land with a great variety of natural vegetation.
- (ii) Nepal suffers from poor means of transport.

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IV. Malayasia and Indonesia

I. OVERVIEW

The continent of Asia seems to creep out towards the south-east with several sharply tapering peninsulas putting into the sea. Festoons of islands are strung like series of necklaces around the watery expanse between Asia and Australia. It is the most maritime part of Asia and has been so all through the ages. It is interesting to know that the Indian valleys were the first to spread civilizing influence to these parts so much so that these parts were referred to as "Vishal Bharat" or Great India in the ancient times. It is one of the most densely populated part of Asia

It is a complete geographical unit in itself, with hot/wet climate, maritime influence, similarity of religion and culture. South-East Asia is a crucible of cultural and racial mixture and makes an interesting subject for study. Malayasia, Indonesia, Philippines, Thailand, Vietnam, Cambodia and Laos, are its main political units. It is intended to study the first two in greater detail than the remaining.

II. SPECIFIC OBJECTIVES OF TEACHING

A. *Acquisition of Knowledge*

The pupil acquaints himself with—

1. the names of different important peninsulas and islands that make up Malayasia and Indonesia
2. the longitudinal and latitudinal extent of each island and peninsula.
3. physical features and climate of this region.
4. vegetation, agricultural produce and the latest developments taking place in these regards.
5. terms such as archipelago, islands of spices, Greater India, etc.

B Development of Understanding

The pupil develops an understanding of the following major ideas .

1. The region has the largest archipelagoes of the world.
2. This is the largest part of Asia's maritime climate.
3. This region accounts for the largest production of rubber and tin in the world.
4. Indonesian group of islands produce and export the largest quantity of spices and hence are called the islands of spices.
5. Unlike other equatorial regions this region has some of the most thickly populated areas
- 6 This region presents a curious mixture of races and religions

C. Application of Knowledge

(a) The pupil compares and contrasts :

- 1 The physical features of any two sub-regions e.g. of Malaya with those of Java.
2. The climate of Malayasia with that of Indonesia
3. The agriculture produce of Malaya with that of Saravak or Sumatra.
- 4 Mineral wealth, and exports of Malayasia with those of Indonesia.

(b) The pupil sees relationship between :

5. Climate and vegetation.
6. Climate and agricultural produce.
7. Climate and life of the people.

(c) The pupil draws inferences about

- 8 The effect of maritime climate on the life of people.
9. Importance of Singapore as an international port and its significance for Indian defence and trade.

D. Development of Skills

The pupil—

1. demarks different islands and peninsulas in the outline map of South-East Asia

2. locates important mountain ranges, volcanic regions and rivers.
3. locates main bays, straits and seas.
4. prepares the relief map of this region, especially that of Malaya, Sumatra and Java.

E. Development of Attitudes

The pupil appreciates—

1. the efforts of the people in developing their agricultural resources against climatic odds.
2. how the people belonging to different races and religions have evolved a common culture and nationhood.
3. how different parts of the world are tending to be more and more interdependent

III CONTENT

I. Malayasia

Malayasia came into being in 1963 by comprising the Federation of Malaya states, North Borneo (Sabah) and Sarawak. Singapore was a part of this country till 1965 but later on it seceded and became a republic. Malayasia has an area of 333470 sq. kms. and a population of approximately 9 millions. Malaya proper has a area of 131050 sq. kms and has 7.8 million people. Malaya in the north is bordered by Thailand. To the east of this peninsula is the China Sea and to the west and south-west is the Indian Ocean. Across the strait of Malacca is the island of Sumatra (a part of the country of Indonesia). The island of Singapore is just near the southern tip of the peninsula. Malaya stretches from 1° to $6\frac{1}{2}^{\circ}$ N. Thus it is situated in the equatorial region. Sarawak and Sabah are the north western and northern parts of the large island of Borneo and are practically in the same latitudes.

Physical Features : A range of mountains forms a backbone which divides the peninsula into two unequal portions, the larger of which lies to the east and the smaller to the west. Smaller ranges run parallel to the main chain in many places and there are numerous isolated spurs.

On the eastern side of the range after a steep descent, the granite formation gives place to the broad quartzite outcrop, to the east of which there is evidence of tin-bearing granite intrusions. The highest peak of the main range is Gunung Iban Korb (2200 m). West of the central mountains the country is undulating and fertile and is extensively developed. There are sandy areas and sand dunes on the western coast. The peninsula may be described as one of the vast forests, interspersed with countless streams and rivers which are perennial. Rivers flow from the mountains into the Bay of Bengal, the South China Sea, and the Strait of Malacca. Penak and Pehang are the important navigable rivers.

Climate : Malaya's climate is hot and humid all through the year except in the mountains. Average temperature in the low areas ranges from 22°C in January to 32°C in July. Mountainous areas enjoy a cooler climate. The whole country gets more than 250 cms. of rain annually. On the west coast the wet season corresponds with the Indian monsoon. Singapore at southern end of the peninsula gets 230 cms. of annual rain and has a monthly average ranging 25.5°C to 27°C.

Vegetation and Animals : Hot wet tropical climate is responsible for a luxuriant vegetation and there are forests over a large area. In the vast forests, the decay of vegetable matter during old ages has enriched the soil to a considerable depth, and from it springs the most marvellous tangle of huge trees, shrubs, bushes, underwood, creepers, and trailing vines, there are also ferns, mosses and parasitic growth bound together by rattans and huge rope like trailers. In most places the jungle is so dense that it is impossible to force a way through it without a woodknife. Some good hard wood timber is found. The principal fruit trees and plant are the 'durian's mangosteen, custard apple, pomegranate, 'rumbutan', jackfruit, coconut, arecanut, sugarcane, palm and banana.

The Asiatic elephant, bison, two varieties of rhinoceros, honey bear, mouse-deer, Asiatic tiger, leopard, jungle cat, wild dog, flying squirrel, python, cobra and other varieties of snakes forms the important fauna of Malaya.

Mining : Tin mines scattered throughout Malayasia supply about one third of world's demand of tin. Other important minerals include bauxite, coal, gold, iron ore and tungsten. Tin concentrate is sent to Penang and Singapore for smelting. Iron ore is mined around Trengganu.

Agricultural and Forests Products Malaya ranks behind Indonesia as the second largest producer of natural rubber. The United States of America is the chief buyer of Malayasia's rubber. More than half of the rubber comes from large plantations owned by foreign companies or individuals. Other crops grown for exports include coconut, oil palms, pineapples, tapioca and tea. Malayasia's forests yield firewood and timber. Other forest products include gutta percha, used for insulation and various gums, oils, and resins.

Rice is the chief crop which the people of Malaya grow for their consumption. One sixth of the total population is engaged in rice cultivation for which water buffalo is used. The important fruits are bananas, yams and pineapples. The chief products of Sabah and Sarawak are sago, rubber, timber, rice, coconut and spices. They also grow coffee, bananas, yams and other fruits.

The Malayasians are expert fishermen both in fresh water and in the sea. Fishing is an important item of food of the people of Sabah and Sarawak.

The People : Malayasia has a population of about 9 millions. About half of the people are of Malaya origin. The other half consists of Chinese, Indians, Pakistanis and Indonesians and a few Europeans. Most of the Malaya work as farmers and fishermen. More areas are not suitable for human settlement as their climate is unhealthy and they are inaccessible in many parts. Coastal areas are thickly populated. Sabah and Sarawak settlements are on the banks of rivers. Only two cities in Malaysia have a population of more than one lakh, Penang and Kuala Lumpur. Kuala Lumpur is the largest town and the capital. Penang is the most important port having tin smelting factories and rubber work. Direct ship service is carried in between Madras and Penang. Kuching is the chief town of Sarawak and Jesselton the chief centre of Sabah.

Singapore is one of the great ports of the world. It is situated on a very important ocean route connecting the Suez and Cape routes of the west to the eastern routes. It is an important air route junction. All sea routes from the Bay of Bengal going towards Australia and eastern Asia pass through Singapore.

2. Indonesia

The Republic of Indonesia came into existence in 1945. Formerly the country was under Dutch rule for about 350 years. This country is made up of a string of islands between Southern Asia and Australia. It includes five large islands and more than 3000 small ones. Early explorers called Indonesia 'the spice islands' or the East Indies. The area of the country is 1.9 million sq. kms.

Indonesia's islands have deposits of coal, gold, petroleum, silver and tin. The tropical climate and fertile soil make the islands excellent places to grow tea and spices. Indonesians have learnt to grow large quantities of food in small areas. They have to do this because there are so many people to feed.

Important Islands of Indonesia : The islands that make up the Republic of Indonesia lie on both sides of the equator between Australia and the mainland of South-East Asia. They stretch for about 4320 kms from the western tip of Sumatra to the Aru islands in the east. The chief islands of Indonesia are Borneo (Kalimantan), Celebes (Sulawesi), Java, Sumatra and west Irian. Geographers refer to the first four as the Greater Sunda islands. East of Java lie the Lesser Sunda islands. These include Bali, Flores, Lombok, Sumba, Sumbawa and Timor. Eastern Indonesia consists of the Maluku Moluccas and some smaller groups of islands.

Java : Java, one of the Greater Sunda islands, lies between the Java sea and the Indian ocean. Sunda strait separates the island from Sumatra on the north-west. The volcanic island of Krakatoa lies just north of Java in the Sunda strait. Bali lies to the east across Bali strait. Java is roughly 1000 kms. long and 150 to 200 kms wide. The island consists of a string of volcanic cones whose lower slopes make a continuous plain. Mt. Mahameru, the island's highest point, reaches 12,060 feet above sea-level. A large highland plateau covers the western part of the island. Wide, fertile, plains run along the irregular north

coast. Most of the rivers are short, the largest being the Solo and Brantas rivers. Dense forests grow on the mountain Djakarata, the largest city in Indonesia and the capital, lies on the north-western coast on a bay of the Java Sea. Most of the cultivated area of the country is found on this island. Although the area of the island is one tenth of the country yet it accommodates 66% of the total population. The average density for the island is 540 people to one sq. km. though in fertile valleys it is more than 1000

Sumatra : One of the Greater Sunda islands, is the second largest island of Indonesia. It lies in the Indian ocean just south-west of the Malaya peninsula. Sunda strait separates the island from Java on the south-east. The Barisan Mountains, a range of volcanic peaks stretch along the entire south-western coast. Many active volcanoes smoke and rumble (ccaselessly) Mt. Kerintji, the highest point in Indonesia, rises to 12,484 feet above sea level near the west coast. Swamps cover much of the north-eastern and south-eastern coasts. Most of the major rivers rise in the Barison mountains and flow north-eastward, including the Inderagiri, Kampar, and Musi rivers. Dense tropical jungles cover the low lands except where the land has been cleared for farming. Medan is Sumatra's largest city and chief port. It has a population density of 36 people per sq. km.

Borneo : Borneo, the largest of the Greater Sunda islands, is the 3rd largest island in the world. It lies between the South China Sea and the Java Sea. Karimata strait separates the island on the west from the Malaya Peninsula and Sumatra. Large swamps lie along the southern and south-western coasts. Towering mountains reach 4140 meters above the sea level at Mt. Kinabalu in North Borneo. The largest city of Indonesian Borneo is Bandjermasin. The Island is very sparsely populated and has an average density of 8 people to one sq. km.

Bali : Bali, one of the Lesser Sunda islands lies between the Java sea and the Indian Ocean. The narrow Bali strait on the west separates the island from Java. Lombok is about 32 km. to the east across Lombok strait. Mountains and volcanic peaks cover most of Bali. Mt. Agung the highest point on the island, reaches 3170 metres above the sea level. A large plain spreads along the southern coast. Bali's largest city is Denpasar.

Celebes : Celebes, one of the Greater Sunda islands, lies between Borneo and Moluccas. The Lesser Sunda islands lie to the south across the Banda and

Flores Sea. The island consists mainly of four large peninsulas separated by gulfs of Tomini, Tolo and Bone. The mountainous land rises to 3472 metres above sea level at Mt Rantemario in the south. Dense forests grow inland fertile valleys and rich grazing lands lie in the mountainous highlands. The largest city on Celebes is Makasar on the Southern Coast.

Climate and Vegetation : Islands situated on the equator receive convectional rainfall. Thus Indonesia is a unique example of country that gets monsoon as well as convectional rainfall. Indonesia is a rainy country Monsoon which a constant, seasonal wind blows between November and March bringing in rains and the trade winds blow from the south-east from June to October in southern islands. Djakarta receives more than 200 cms. of rains in a year. In parts of Borneo and Sumatra, as much as 350 cms. may fall in a year. The lowlands usually have humid, tropical temperatures. Djakarta's temperature averages 26°C all the year round. Thus islands of Indonesia are forested Dense equatorial forests are little exploited, though they contain many such useful trees as rubber, mahagoni, ebony, rosewood, spices, palms, and bamboo about two third area of the country is forested.

Mineral Resources : Tin is mined in Bangka, Billiton, Riouw, Sumatra, Petroleum is obtained from Borneo, Sumatra and Java. The most important mineral resources of the country are tin and petroleum Some coal, iron ore, bauxite, gold, silver, diamonds and rubies are found in this country. There are important oil fields in Java and Sumatra.

Way of Life : The average Indonesian is a farmer living in a small village. His family helps with the farming Often his wife and children work part time in small rural industries such as weaving, tanning, or rice polishing

Agriculture : Agriculture is the chief occupation of the people. One tenth of the total area is cultivated and this engages 2/3 of the total population. The important agricultural products are rice, sugarcane, tobacco, cotton, tea, coffee, coconut, groundnuts, cassava, spices (pepper), sago, and curichara. Rubber, sugarcane, tea and coffee are the most important plantation crops With the development of cultivation of plantation rubber, Indonesia today is the largest producer of natural rubber Rubber is grown in North Java, East Sumatra and South-West Borneo. Rice is grown on 40% of the cultivation area

Industries : Development of modern industry in Indonesia has started only after the country became independent. Formerly this 'land of spices' was collecting

centre for the raw materials needed for the Dutch and European markets. There are a number of native industries such as bamboo hat painting, batik work, copper working, wood carving, cane work, and printing. The people of Java are proud to possess at least one garment of Batik work. Cottage industries are being organised. Large scale factory industries such as cement, glass, cotton textiles, paper, match and sugar manufacturing have been established. There are ship building yards at Djakarta and Surabanga. Bogor in Java and Palembang in Sumatra are rubber manufacturing centres. About $4\frac{1}{2}$ lacs of people are engaged in organised factory industries and out of them 4 lacs work in Java.

Transport : Coastal shipping is the most important means of transport in the islands. There is a regular air service also. Java has a network of railway and roads. The total rail route is 6640 kilometres long.

Trade : Indonesia has a large export trade consisting of rubber, tin, mineral oil, copra, tea, timber and spices. Rubber accounts for half of total export value of Indonesia. U.S.A., Japan, China, France and U.S.S.R. are the chief importers of these goods. Indonesia imports cloth, foodstuffs, metals, machinery and automobiles from abroad. Singapore is a great trading centre.

IV TEACHING HINTS

1. Since most of the content in this unit is information oriented, it would be desirable to help the pupils find out all the facts themselves. The pupils, therefore, be asked to open their atlases and to answer some such questions
 - i) In which part of Asia are Malayasia and Indonesia ?
 - ii) What are the constituents of Malayasia and Indonesia ? What is the extent of each in terms of longitudes and latitudes ?
 - iii) What bays, straits and seas separate them from each other ?
 - iv) Name some of the mountain ranges, peaks volcanoes and rivers in these countries.
2. The students may be shown the specimens of sago, cardamom, pepper cloves, etc and the teacher may ask them the countries from which all such things are obtained and thus may teach them the agricultural produce of this region.

3. The teacher may start a discussion pertaining to the relation between the climate and the production of rice, sugarcane, maize, rubber, tea, coffee and ask them the parts of this region that may grow such agricultural produce.
4. The students may be asked to trace out an outline map of South-East Asia and show these products at appropriate places
5. Pictures depicting the life of the people, for example tapping the rubber tree, picking tea leaves, transplanting of rice, gathering of coconut and pine apple, fishing, etc., may be exhibited on the class bulletin board.
6. Pictures of the people living in the basins of Amazon and Congo may also be shown and the students may be asked to find the points of similarity and differences between them, as also reasons.
7. Students may also be made to find out the differences in the types of houses and the made of clothing in India and these countries.
8. Students may be helped in preparing a relief model of this region.
9. The students may be helped to read and present class reports about cultural and economic contacts between India and Indonesia.

V. EVALUATION

1. Describe the physical features of Malaya bringing out the nature of the land in different parts of the country.
2. Describe the effects of the relief and the climate over
 - a) vegetation
 - b) agricultural produce in Indonesia
3. How do occupations of the people in Malayasia differ from those in the valley of the Ganges ?
4. Mention the chief exports and imports of this region and compare them with those of India.
5. Give reasons for
 - a) Indonesia imports rice although it is her principal crop.
 - b) Fishing is one of the main occupation of Malaya
 - c) Sumatra is still a partly developed island.
 - d) Climate of Indonesia is hot and wet throughout the year.

- e) Singapore has become an important international port.
 f) Java is the most densely populated part of equatorial Asia
6. Answer the following questions :
- Which is the capital of Malayasia ?
 - Give name of two navigable rivers of Malaya.
 - Name two plantation crops of Indonesia.
 - Which is the highest peak in Malaya ?
 - Write names of two volcanoes in Indonesia ?
 - Give two important minerals of this region
 - Which of the islands of this region is densely populated ?
 - Give the name of the medicinal plants.
 - Name some commercial crops of Sumatra
 - Write the names of four largest islands of Indonesia.
 - Name the country of which Singapore is the capital
7. Match the following to make correct pairs :
- | | |
|---------------------------|--------------|
| 1. Highest peak in Malaya | Perak |
| 2. Capital of Indonesia | Singapore |
| 3. Sea port | Kuala Lampur |
| 4. River | Djakarta |
| 5. Strait | Gunongkorbu |
| | Malacca |
| | Sumatra |
8. Write the letter of the correct answer in the bracket given in the right hand margin.
- I. Railways have not been developed much in Malayasia because :
- Coal is not available.
 - The land is mostly hilly.
 - The country has a poor economy.
 - Water ways have been developed.
 - It rains very heavily.
- I ()
- II. The crop that does not grow in Indonesia is
- Rice
 - Sugarcane

C—Maize
 D—Rye
 E—Sugar beet
 F—Tea.

II ()

III. Billiton and Bangkare are favourable places for

- a) Rubber plantation
- b) Teak forests
- c) Spices
- d) Fishing
- e) Tin mining.

III ()

VI. READING REFERENCES

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V. Iran and Afghanistan

I. OVERVIEW

Afghanistan and Iran are situated on a vast plateau between the great Pamir knot on the east and the Armenian knot on the west. The plateau is surrounded by mountains on all sides. Although situated mainly on the plateau, both Iran and Afghanistan embrace the mountain rims and strips of the adjoining lowlands.

These regions experience extremes of temperature. The land is almost barren with clumps of grass grown in patches. There are also sand dunes and deserts. Herdsmen roam from pasture to pasture feeding their goats, sheep or camels. From the wool, coloured with the vegetable dyes, are made the rugs for which all these highland regions are famous. The towns and villages of the settled population are found in the areas watered by the streams and springs.

Contact with advanced countries has resulted in far reaching changes in the traditional ways of life. These people are now adopting Roman script and western costume and have started a modern system of education. Huge amounts of royalty received from the oil fields exploited in collaboration with the westerners are being utilised to mechanise agriculture and means of communication and transport.

II. SPECIFIC OBJECTIVES OF TEACHING

A. *Acquisition of Knowledge*

The pupil

1. knows the location of Iran and Afghanistan
2. studies the relief features and climatic conditions of these countries.
3. knows the agricultural and mineral resources.
4. studies the occupations of the people and the importance of means of transport and towns

B Development of Understanding

The pupil develops an understanding of the following major ideas :

1. Relief and climate have been responsible for the nomadic life of the people of Iran and Afghanistan.
2. Women folk supplement the income of the family by weaving carpets in their spare time and it is now the most important cottage industry in these countries.
3. In the absence of other means of livelihood (besides herding) there is grim poverty in these countries and standard of living is very low.
4. Exploitation of mineral oil resources has revolutionised the life of the people belonging to the parts of the country in which mineral oil has been located.

C. Application of Knowledge

The pupil

1. compares the life of the people in western Iran with those living in eastern Iran and Afghanistan.
2. compares the relief features and climatic conditions of Iran with those of Afghanistan.
3. realizes that exploitation of mineral oil has brought prosperity in the land.
4. establishes the relationship between :
 - the location of these countries in Asia and the climate.
 - the relief features and means of transport and system of drainage.
 - the climate of these countries with vegetation, agricultural produce and life of the people.
 - the exploitation of mines and growth of new settlements.
 - exploitation of mineral sources and newer economic developments.

D. Development of Skills

The pupil

1. demarks Iran and Afghanistan in the outline map of Asia.

2. locates important mountain ranges, rivers, oases, oil fields and towns in the outline map of Iran and Afghanistan.
3. shows the rail, road and air routes.
4. shows the summer and winter conditions of temperature.
5. shows density of population.
6. prepares relief maps of Iran and Afghanistan.

E. Development of Attitudes

The pupil

1. appreciates that in the underdeveloped countries also people possess a strong sense of beauty e. g. weaving rugs and carpets with exquisite designs even though they had no formal training.
2. sympathises with the herders and shepherds who lead a hard life in these parts,
3. appreciates the new efforts that are being made to raise their standard of living.

III. CONTENT

(A) Iran (Persia)

Iran is a kingdom with an area of nearly 1,621,860 square kilometres. It stretches nearly for 2240 kilometres from south-east to north-west and for 1400 kilometres from north to south. It is nearly seven times the size of Great Britain but has only 22 million inhabitants. The country lies between 25°N to 40°N, and 44°E and 62°E. The country is bounded by U.S.S.R. and the Caspian Sea in the north, Afghanistan in the south-east, Pakistan in the east, Persian Gulf in the south, Iraq in the south-east and Turkey in the west.

Physical Features : Most of Iran consists of an extensive table land, surrounded by folded mountain chains. This plateau which forms the heart of Iran has an elevation of (1915 metres to 1524 metres). It is surrounded on all sides by walls of mountains and except in eastern Iran where great desert plains are predominant, the surface of the plateau itself is traversed by hill ranges.

In the north the Elburz mountains rise to a height of about (5751 metres) in the great volcanic pile of Demavand. (What Fujiyama is to Japan, the Demavand is to Iran) These form a high range in the north overlooking the Caspian Sea. They extend eastwards and join the Hindukush in Afghanistan. The Zagros ranges are found on the south-western fringe of the plateau and extend from Armenia to Shiraz. They are largely limestone ranges. The whole table land is a desert with a few oases. Along the southern borders of Iran, the coastal strip is narrow, dry and barren. There is an area of lowlands adjoining Mesopotamia. On the north there is a narrow strip of plain along the shores of the Caspian Sea. This strip is important because of its rich soil and abundant rainfall.

Two great deserts stretch right across eastern and central Iran and they are hindrance to the communication between Iran and the neighbouring countries. The salt swamp and sand hills divide the region more completely than any range of mountains. The Dasht Kavir desert known as the great salt desert consists of gravel soil covered with small bushes, tufts of grass and scanty vegetation. Fresh water is scarce in this region. It splits up into blocks and in some places the ridges are half to one metre high.

Most of the plateau is a region of inland drainage having two basins. To the west is the basin of Iran and to the east is the basin of Seistan which extends to Afghanistan.

There is only one navigable river, the Karun, which flows into the same delta as the Shatt-el-Arab. On the slopes of the Elburz, are a few small rivers flowing into the Caspian Sea.

Climate : In the interior of Iran, at high elevations a warm temperate climate is prevalent. In winter the cold is intense, the mean January temperature being slightly above freezing point but the summers are characterised by cloudless sky, dry air and scorching heat. Tehran, situated at a height of 1230 metres gets less than 25 cms. of rain, has a January average of 2°C and July average of 30°C. The rainfall rarely exceeds 35 cms. and falls almost entirely in winter. The rain is derived from the cyclone of Mediterranean origin. The narrow coastal string along the Caspian near the slopes of the Elburz receive greater rainfall.

Natural Vegetation : Most of the mountain ranges of Iran are bare of natural vegetation. The densely forested regions are found along the shores of the Caspian Sea where there is ample rainfall. Forests of economic value are found on the slopes of the Elburz. The natural vegetation of most of the dry plateau is scrub or thorny bushes. The gum Arabic and gum tragacanth are obtained from these thorny bushes.

People : The people of Iran are fair in complexion, tall, well built and have long noses. They are proud of their literature. The poets of this land are as famous as her roses and their tales are full of legends of heroes e.g Sohrab and Rustam. To Iran we also owe the games of polo and chess. Iran is a sparsely populated country, the density for the whole country being 13 people to a square kilometre. The oases and valleys have clusters of villages. Various tribes inhabit the south western corner.

Agriculture Agriculture is one of the occupations of the people of Iran and it depends entirely on irrigation except along the Caspian coast. The cultivated land is very limited. Water for irrigation is obtained from mountains through underground canals. The system is known as Karez irrigation. Wheat, barley and millets are the leading crops. Rice is grown along the Caspian border and it is sufficient to supply the needs of the whole country. On wet mountain slopes tea plantations are being raised. Opium, cotton and medical plants are also grown in many places. At many places forests have been cleared and there are large areas in the Caspian region where vine, figs and mulberries are grown.

The rearing of livestock is important in most of the places. Sheep and goats are reared on the dry hill pastures. The horses of Persia have long been famous. The fishing industry along the Persian Gulf is increasing in importance, pearls are obtained from the Persian Gulf.

Minerals : Coal and iron are found in the north-west, but the only mineral which has been developed is oil. The enormous expansion of the Iranian oil production in recent years is one of the great achievements of modern times. The principal field is located near the shores of the Persian Gulf at the foot of the Zagros and the region is known as Kuzishthan and Masjide Sulaiman. Pipe lines connect the oil fields with the refinery on the island of Abadan in the Persian

Gulf. The other oil fields are found in northern Iran, but the southern belt has developed much in recent years. The development of oil fields has provided employment for lakhs of people, has led to building up of roads and railway lines, schools and hospitals and thus has brought prosperity to the country.

Industries . The principal indigenous industry of Iran is the manufacture of carpets. Wool is used for making rugs and carpets with beautiful colours and delicate designs. The industry is still on a small scale. Although the industry has suffered from competition, yet carpets are Iran's leading export. Carving, inlaying and artistic metal working are other cottage industries of Iran. Sericulture is carried on as a cottage industry in the north-west. New industries like cement, plastic goods, glass, sugar, vegetable oils and soap manufacturing are coming up.

Transport and Communication : Communication in a region like this is very difficult. It depends chiefly on the use of camels and mules. In most parts there are no proper roads. Roads connect Tehran, the capital, with other parts of the country following the old caravan routes. Motor transport has made tremendous strides in the country. Iran has 3400 kilometres of railways. The important railway line in Iran is the Trans-Iranian railway which runs from Bandar-Shah, on the Caspian Sea to Bandar Shapur, on the Persian Gulf. River Karun is navigable in its lower course.

Important Cities : Tehran, the capital of Iran, is situated at the foot of the Elburz mountains. It is the most progressive town in Iran. It commands several important caravan routes. An important commercial town in Iran is Tabriz situated in the north-west of the country near the borders of Turkey and U.S.S.R. The former capital of Iran, Isfahan, stands on a fertile plain almost in the centre of the country. The chief port of Iran is Bushire, which is situated on the Persian Gulf.

Foreign Trade : Carpets are Iran's typical export. Apart from it, petroleum, fruits, cotton, opium and rice are exported to other countries.

Cotton goods, sugar, tea, machinery and automobiles are important items of import.

(B) Afghanistan

Introduction : Afghanistan lies to the north-west of Pakistan. It forms the eastern part of the great plateau of Iran. It rises from the Seistan basin in the west to a height of over 2000 metres in the east. The plateau is traversed by great mountain chains, of which the loftiest is the system of the Hindukush rising to heights of 6096 to 1520 metres above sea level. The country is land locked and is not easily accessible. The narrow Khybur pass connects Afghanistan with Pakistan. The country as a whole is barren. Snow capped mountain ranges are succeeded by barren steppes or sandy deserts at lower elevations.

In this mountain land dwell many tribes. The people are born fighters, and are wedded to their religion *Islam*. The ancient caravan routes are still in use in the north and south-west. The land is virtually closed to foreigners, and some parts are almost unexplored, though modern means of communication have found their way to this land.

Position and Size : Afghanistan is bounded by the U.S.S.R. on the north and north-west, Iran on the west, and Pakistan on the south and south-east. It has an area of 657500 square kilometres. It extends from 29° to 38°N and 60° to 71°E.

Afghanistan has a rugged terrain with deeply dissected hills and plateaus. The Hindukush mountains in the north merge over 5000 metres. Some passes in this range provide routes to the northern fringe of the country and to the U.S.S.R. South of the Hindukush are series of alluvial plains, mostly drained by Kabul river and here is situated Kabul, the capital. The deserts of the south and west cover nearly a fourth of the area of the country. Here lies the fertile valley of Helmand. This river drains into the inland lake, and is the largest river of the country. The Amer Darya forms the southern frontier for 770 kilometres.

Climate : In general the climate of Afghanistan is very dry, characterised by great extremes of temperature and a light snowfall or rain coming mainly between January and April. The rainfall does not exceed 50 cms. In summer the temperature exceeds 43°C in the drier parts of the south-west and the country is scorched by the fierce glare of the sun. In winter, frost, snow

and bitter winds prevail. Rain does not exceed 5 cms. The temperatures in December and January range from below freezing to a little above freezing point. In the south-west the rainfall is only between 5 cm. to 8 cm.

Agriculture : Cultivation is limited to oases and large river valleys where dates, pomegranates and sugarcane are the leading crops. Wheat, millet and maize are other important crops. In the rich valley of Kabul a great variety of fruit is grown such as almonds and peaches. Grapes are grown on lower slopes. The valley of Herat is noted for its melons. Flocks of sheep constitute the main wealth of Afghanistan. The nomads drive the sheep from pasture to pasture. The sheep furnish wool and meat.

Minerals Afghanistan is comparatively rich in minerals, gold, silver, coal, iron and lead are found in the southern part and copper in the northern. However, no organized attempt has been made to mine these minerals and there is practically no production.

Industries : The chief industries of Afghanistan are the manufacturing of silk, felts, carpets, leather goods, glass and articles from camels' and goat's hair.

Transport and Communication : There are three main lines of approach from the outside world (1) From Russian Turkestan, where the railway actually reaches the Afghan border, (2) A well known route through the Khyber Pass from Peshawar to Kabul and this railway line reaches the frontier, and (3) From the town of Quetta in Baluchistan to the town of Kandhar.

There is no railway in the country and no navigable river. Except for the military road through Khyber Pass between Peshawar and Kabul, the traveller must follow the valleys and climb the passes by the few rough trails that exist. Kabul is on the air route from Delhi to Moscow. The camel and the ass, the pack horse and ox are normal means for transport.

Cities : The capital of Afghanistan is Kabul. It commands most of the passes from west, particularly the famous Khyber pass which leads to Pakistan. The town is pleasantly situated amidst beautiful gardens and fertile fields. It is a

place of great strategic importance and the centre of trading routes of the country.

Kandhar is the chief commercial and strategic town of the south. Herat, the principal town of the west lies in the centre of a well irrigated and fertile district.

Exports and Imports : The chief exports are raw wool, woollen goods, shawls, dry fruit, vegetables, asafoetida, drugs, spices, cattle and hides. The imports are cotton goods, indigo, dyeing material, sugar, hardware and light machinery.

Afghanistan is a sparsely populated country and one sixth of the population is nomadic consisting of a number of tribes. Nearly all Afghans except Pathans speak Persian in addition to their own language. The Afghans are well built and have a strong physique which enable them to face the roughness of nature.

IV. TEACHING HINTS

1. The pupils may read the maps of Iran and Afghanistan showing relief climate, vegetation, agricultural produce and mines.
2. The pupil may be helped in preparing relief model of this region emphasizing its intermontanus plateau character
3. Pictures depicting the different aspects of the life of the people may be exhibited (on the class bulletin board).
4. Pupils may be asked to collect pictures from different magazines—(Illustrated Weekly, National Geography) illustrating how oil mining has changed the life of the people in Iran.
5. Pupils may be guided in contacting the Persian and Afghan embassies to procure geographical information about these countries.
6. Pupils should be made to fill in the outline maps of Iran and Afghanistan the following items:
 - a. Elburz
 - b. Hindukush

- c. The Helmand river
 - d. The Karun
 - e. Area of the heaviest rainfall
 - f. Oil field of Masjid-e-Sulieman
 - g. Bushir
 - h. Tehran, Shiraz, Kabul and Herat.
7. They may collect the following information after interviewing people of the locality.
- (i) Articles imported from Iran and Afghanistan and sold in local market.
 - (ii) Words of Persian language commonly assimilated in the local dialect.
 - (iii) Styles of Persian poetry and music practised in India.
 - (iv) People of Persian origin living in India.
 - (v) Persian designs of carpets.
8. Pupils may prepare material for display on bulletin board regarding :
- (i) Persian king who invaded India.
 - (ii) Similarity of Persian language with Sanskrit.
 - (iii) Trade between Iran, Afghanistan and India.
 - (iv) Pseudo language and its similarity with Sanskrit.
9. They may study pictures on the following themes :
- (i) Sheep rearing in Iran.
 - (ii) Oil mining in Iran.
 - (iii) New developments in Iran and Afghanistan.

V. EVALUATION

1. Describe the physical features of Iran/Afghanistan under the following heads.
 1. Different physical divisions
 2. Names of the mountain ranges with one or two high peaks, mention whether they are fold or volcanic.

- 3 Rivers and river basins, together with uses to which the rivers have been put.
 4. Minerals.
2. Describe the factors that have influenced the climate of Iran/Afghanistan. Draw a map showing the summer and winter conditions, rainfall and temperature
 3. Explain how Petroleum Industry has helped to build up the economy of Iran.
 4. Answer the following questions
 - (a) What is the name of the navigable river in Iran ?
 - (b) What winds cause rainfall in Iran in winter ?
 - (c) What is the principal cottage industry of Iran ?
 - (d) What are the chief exports of Afghanistan ?
 - (e) Which is the important railway line in Iran ?
 - (f) What is the capital of Afghanistan ?
 - (g) During which season does Afghanistan get more rainfall ?
 - (h) What typical tree is found along the southern coast of Iran.
 - (i) Name one inland drainage of Iran.
 - (j) What is the capital of Iran ?
 - 5 Give reasons ;
 - (a) Afghanistan has scanty rainfall.
 - (b) Beasts of burden are the chief means of transportation.
 - (c) A big proportion of population leads a nomadic life.
 - (d) Iran does not have good harbours.
 6. Match the following to make correct pairs :

1. Volcanic peak	Teheran
2. Chief oil field in Iran	Herat
3. Oil refinery	Abadan
4. Capital of Iran.	Kandhar
5. Capital of Afghanistan	Demavand
	Kabul

- | | |
|---------------------------|-------------------|
| 6. Chief port of Iran | Bushme |
| 7. A tribe in Afghanistan | Bander Shah |
| | Pakhloon |
| | Masjud-e-Sulehman |

7 Write the letter of the correct answer in the box provided for the purpose.

(i) The Area of heavy rainfall in Iran is :

- A. The northern slopes of Elburz.
- B. The southern slopes of Elburz.
- C. The plateau of Iran.
- D. The northern slopes of Zagros.
- E. The southern slopes of Zagros.

(ii) Kabul is a town of strategic importance because :

- A. it is the capital of Afghanistan.
- B. it lies on the air-route from Delhi to Moscow.
- C. it is the biggest business centre of Afghanistan.
- D. it controls the Khyber Pass
- E. it is a growing industrial centre.

(iii) The most important melon producing area of Afghanistan is :

- A. Helمند Valley.
- B. Kabul Valley.
- C. Herat Area.
- D. Kandhar area.
- E. North-eastern region of Afghanistan.

(iv) The industry that brought prosperity to the people of Iran is :

- A. Agriculture
- B. Tea plantations
- C. Carpet making
- D. Brewaries
- E. Oil mining

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VI. Japan

I. OVERVIEW

Japan, popularly known as “the land of rising sun” is a leading industrial nation of Asia. With just one-eighth of the total area of India, Japan supports a population which is one-fifth that of our country. This means that the average density population of Japan is more than one-and-a half times that of India.

Japan has a rugged terrain which leaves no more than one-sixth of the area suitable for cultivation. Furthermore, the country lacks basic raw materials and fuels required for heavy industries. In spite of these drawbacks the Japanese people enjoy a high standard of living.

The country has developed a variety of industries depending mainly on imported raw materials and an abundance of skilled labour. The country practices intensive agriculture in order to make the best use of its meagre agricultural resources.

The irregular shoreline with many deep natural harbours has favoured the growth of ports, shipping, fishing, trade and ship-building industries on a very large scale.

Today, Japan is one of the world's great industrial and trading nations. It has very rapidly modernized its industries. It was able to bring about this change very quickly because of its rapid growth in education, science and technology.

Although Japan is a highly industrialized country advanced in science and modern technology, various fine arts and handicrafts find a place of pride in the day-to-day life of the people. Its people are fond of gardening, floral decorations, and keeping their houses in an artistic manner, displaying a high aesthetic sense, so peculiar of the Japanese people.

II. SPECIFIC OBJECTIVE OF TEACHING

A. *Acquisition of Knowledge*

The pupil will recall and recognize—

1. the location of the Japanese islands in relation to the mainland of Asia and in terms of latitude.
2. the main features of relief and climatic conditions.
3. terms like volcanoes, earthquakes, islands, typhoons and ocean currents.
4. the meaning of intensive cultivation and the names of the agricultural products, including raw silk.
5. factors favourable for the development of the major industries and Japan's place among the industrialized countries.
6. the significance of fisheries in Japan and the modern methods of fishing.

B. *Development of Understanding*

The pupil develops an understanding of the following major ideas :

1. In spite of the paucity of raw materials Japan is one of the foremost industrialized nations of the world.
2. The prosperity of Japan lies in the industrious nature of the people, their adaptability, frugal habits, business acumen and willingness to accept new ideas.
3. The Japanese way of life represents a blending of the east and the west, and of the old and the new
4. Japan is also called "the Nation of the Farmers of the Sea."

C. *Application of Knowledge*

The pupil—

1. discriminates between "a typhoon and a cyclone, a cold and a warm current, a volcano and an ordinary mountain
2. cites examples and illustrations to indicate how natural phenomenon and other factors influence everyday life of the Japanese.
3. compares the development of the fishing industries of Japan with that of India.

4. sees relationship between topography and rainfall on one hand and the development of hydro-electric power on the other.
5. sees the relationship between intensive farming and increased production.
6. appreciates that even the basic natural limitation such as paucity of raw materials need not stand in the way of industrial progress.

D. Development of Skills

The pupil develops the following skills :

1. Locates major Japanese islands, mountain ranges and important cities on a map.
2. Fills an outline map, the major ocean currents and winds that influence the climate of Japan.
3. Prepares simple bar diagrams showing exports of Japan.
4. Interprets a simple bar diagram depicting imports of Japan.

E. Development of Attitudes

The pupil

1. appreciates the hardworking nature of the Japanese people.
2. learns to value the dignity of labour and realises that only hard work make a nation prosperous.
3. appreciates the fact that in the process of industrial development Japan has not lost her ancient values and aesthetic sense.
4. appreciates the receptiveness of the Japanese people and their optimistic outlook towards life, especially in the reconstruction of its national economy.

III CONTENT

Physical Features : Japan consists of about 3000 islands dotted of the eastern coasts of Asia. Of these the four islands namely, Hokkaido, Honshu, Shikoku and Kyushu are important. Japan has an area of 361,622 square kilometres and this is less than one eighth of the total area of India. It is roughly equal to that of Andhra Pradesh.

Japan is mainly a mountainous country. Most of the mountains are of volcanic origin. The islands consist of mountainous interiors, surrounded by

narrow, disconnected lowlands. Two parallel chains of mountains may be distinguished each forming a long curve. One chain lies close to the west coast and the other along the east coast. The midland valley is completely obliterated by the knot of mountains in Honshu. To the south rises one of the most famous volcanic mountains Fujiyama. This sacred mountain of Japan is 3776 metres above sea level.

Japan is described as a land of volcanoes and earthquakes. Earthquakes occur more frequently in Japan than perhaps anywhere else in the world. The floor of the Pacific Ocean adjoining the shores of Japan is extraordinarily deep. The high mountains of Japan are counterbalanced, as it were, by one of the great ocean deeps. There are many volcanic peaks of which 58 are still active.

Swift, short streams which are of little use for navigation are highly valuable for the generation of hydro-electric power. They flow through the narrow disconnected lowlands. Numerous hot springs and volcanoes as well as rivers and lakes add to the beauty of the scenery. The coastline is very irregular with many alternate high headlands and narrow bays.

Climate : Compared to the mainland, Japan experiences climate modified by its insular position. It experiences abundant rainfall ranging from 100 cm. to 250 cm per annum. There is snowfall in the northern parts of the country in winter. The prevailing north-west winds from Siberia are responsible for severe winters in the north. Japan is divided into two climatic regions, the sub-tropical south and temperate north. The sub-tropical south experiences summer rains due to monsoon winds. Severe cyclones that originate in the Pacific and hit the southern coasts are called typhoons. The cold Kurile current flows along the east coast of Hokkaido, and the warm Kuroshio washes the south-eastern coast of Japan. The mingling of hot and cold waters of the two currents usually gives rise to thick fogs. It also ensures constant supply of food for the fish.

Vegetation : Forests cover about two-thirds of Japan's total land area. Deciduous forests intermixed with poplars and conifers at high altitudes are

found in the north. These forests are the main source from which the country derives its principal building materials, much of its paper-pulp and some of its domestic fuels.

Agriculture : Japan, being a group of small volcanic islands with many hills and mountains, has only 16 per cent of the total area under cultivation. Faced with the grave problems of feeding 97 million people with a very limited arable land, Japan has raised the agricultural production considerably. Her soils are generally poor and modern techniques of farming are now in vogue. Use of farm manures and fertilisers, inter-tillage, double cropping terracing and transplanting are some of the techniques employed by the Japanese to get the maximum yield. The small land holdings enable the farmer to bestow greater attention on his plot. Every three Japanese out of ten are engaged in agriculture.

The main crop is rice, and it is the staple food of the Japanese people. Nearly 80 per cent of Japan's rice requirement is produced within the country. The average yield of rice in Japan is three times that of India. Japan's rice harvest have been so consistently bountiful that a yield of 12 million tons once considered more than a bumper harvest is now regarded as normal.

Wheat and barley are other important crops. Millets, soyabeans and potatoes are widely grown. Soyabeans are used as foodstuff, for edible oil and in the manufacture of cosmetics and in other industries. Mulberry trees are widely grown and Japan is one of the leading countries in the production of natural silk. Tea is also a cash-crop of Japan, although not nearly as profitable as silk. A very large proportion of tea is used by the Japanese themselves. A favourable sub-tropical rainy climate and cheap labour make cultivation of tea somewhat profitable.

Fisheries : Japan is called a nation of farmers of the sea. The shallow seas around Japan, the meeting of the cold and warm currents, the proximity of the sea to the thickly populated land area, deficiency in food grains, all contribute to make Japan one of the world's leading fishing nations. The total

Japanese catch in 1963 was 7 million tons and this was the second biggest in the world accounting for 15 per cent of the total world catch.

The coastal waters of Japan have been transformed into fish farms, as it were. These still waters are systematically stocked with quick growing varieties of fish. Care is taken to feed the fish properly. Controlled fishing at regular intervals results in big harvests. This is known as fish farming.

Japanese have invented a clever process whereby oysters are made to form natural pearls and large number of these culture pearls are obtained from the waters of Japan

Mineral Wealth : Japan is rather very poor in mineral resources. The country possesses some deposits of copper and very little amounts of mineral oil and coal which is of low quality and unfit for cooking. However, owing to an abundant rainfall and uneven topography, Japan is richly endowed with water power which has been highly developed. It ranks fourth in the generation of electric power in the world. Japan imports petroleum, coal, iron ore, manganese and iron scrap from other countries.

Iron and Steel Industries : The iron and steel industry of Japan has been growing at a rapid pace during recent years. In 1964, Japan produced 24 million tons of pig-iron and 39 million tons of steel. Japanese iron and steel industry accounts for about one eighth of its total national production in terms of value. Japan's iron and steel industry depends heavily on imported raw materials. It imports iron ore from India as well.

Machines and Electronics : Since World War II, the machine tool industries have set the pace for Japan's remarkable economic growth in the past few years. Industries, television sets, transistors, and radios are the major products of Japan's electronic industries. In the production of electronic computers and automation equipment, cameras and optical instruments, Japan is showing noticeable growth.

Ship-building Industry : The Ship-building industry in Japan has developed to a great extent. The natural harbours, availability of steel, huge investment of capital and highly skilled personnel favour the ship-building industry in Japan. Japan today is the largest builder and exporter of ships in the world. Japan in 1957 launched 2.5 million gross tons, accounting for 29 per cent of the world tonnage launched.

Chemical Industry : Chemical industry represents one of the most important fields of industrial activity in Japan. It now ranks fourth among the producers of basic chemical raw materials like sulphuric acid, caustic soda, carbide and ammonium sulphate.

Textile Industry : The textile industry continues to be one of Japan's most important industries. Through raw materials like cotton, wool and wood-pulp are imported from United States, India, and Australia and a few other countries, Japan is still one of the leading textile producing nations of the world.

Since World War II the production of synthetic textiles has become more significant. Japan is second only to the United States in the production of these commodities. Japan has adapted itself to modern industrial civilisation remarkably well. In this respect, it is the envy of many of the Asian neighbours. Though its resources are meagre, the skill, ingenuity and hard working nature of the Japanese people have brought the country into the forefront of the world's industrial nations. Japan lives and prospers by the manufacture of finished goods and international trade.

Tokyo and Yokohama are noted for their diverse manufactures. Osaka, Kobe, and Kyoto are famous for textiles, ship-building and hardware industries respectively. Nagoya is well known for textiles and ceramics.

Tokyo has a population of about 12 million and it is the largest city in the world. Its population is thus greater than the whole of the Australian continent. It is the focal point of the whole of Japan. Every type of heavy and light industry is found here ranging from huge factories to small workshops.

Textiles, machines, electric goods, food processing and ship-building are some of the prominent industries. Tokyo is the commercial administrative and educational centre of Japan.

Exports and Imports : Foreign trade is the life blood of Japan. Japan depends on overseas trade for its survival. It imports foodstuff and most of its raw materials. In turn, in order to pay for its purchases it processes raw materials and finished products are exported. Raw materials such as wood, crude oil, wool and food stuffs constitute Japan's principal imports. It exports machinery, chemicals, metal products, ships, refined mineral oil and petroleum products, and a variety of electronic goods. The United States is its biggest trading partner.

Today, the East and the West, the new and the old find their meeting ground in Japan, fused in a unique harmony. It represents a blending of the ancient oriental heritage and the benefits of modern technological society.

IV. TEACHING HINTS

- A. The lesson can perhaps be introduced by asking children to prepare a list of articles that are made in Japan and are available in local market. If possible, they may bring a few articles made in Japan.
- B. Ask the pupils to prepare a bar diagram using the following data :

Exports	Figures given are in million dollars
1. Iron and Steel	700
2. Ships and Boats	340
3. Cotton Fabrics	300
4. Clothings	200
5. Fish	200
6. Metal Products	200
7. Radios	190

- C. Prepare a bar-diagram showing the imports of Japan in 1963 using the following data :

Imports	Figures given are in million dollars
1 Crude oil	1,000
2. Raw Cotton	460
3. Lumber	400
4 Raw Wool	375
5. Iron Ore	360
6. Sugar	340

Study the bar diagram carefully and answer the following questions :

- (i) Which is the leading item of import of Japan ?
 - (ii) Which food-stuff is imported by Japan ?
 - (iii) What relationship do you notice between the sugar imports of Japan and its climatic conditions ?
 - (iv) Which finished products do you see in the list of imports of Japan ?
 - (v) Compare the lists of imports and exports of Japan and find out which imports are processed and re-exported by Japan.
- D. Make a relief model of Japan showing
1. Mount Fuji.
 - 2 The warm Khurio Shio current near the Southern coast.
 3. The cold Kurile current along the eastern coast.
- E. Make a model of a typical farm house with the aid of the following information .

A Japanese farm house has unpainted thin wooden walls with lattice windows and a thatched roof. It is quite small but can appear roomy enough when the paper and lattice partitions are slid aside to make the house into one large single room.

- F. Divide the class into four groups and ask them to collect information on the following topics. Each group may prepare a brief report and present it to the whole class
- (a) Japanese method of rice cultivation
 - (b) Pearl culture
 - (c) Fishing industry
 - (d) Tea Festival in Japan
- G. Collect pictures from periodicals and magazines about Japan, classify them and prepare a class album. Add notes to them
- H. Imagine yourself to be the son of a Japanese farmer, who has a little piece of land, some mulberry trees and a dozen head of cattle. Write a letter to your friend in India how you spend a day at home.

V. EVALUATION

- I. Match the following to make correct pairs :

(i) Volcanic Peak	Hokkaido
(ii) Political Capital	Yokohana
(iii) Island	Nippon
(iv) Sea Port	
(v) Warm current	Fuji Yama
	Tokyo
	Kyoto
	Khurio Shio

- II. Complete the following statements by choosing a correct ending .

- (1) Japan is a highly industrialised country because :
- (a) It has large resources of iron ore.
 - (b) It has large quantities of oil.
 - (c) It has large hydro-electric power resources.
 - (d) It has a large agricultural base.
 - (e) It has a big merchant fleet.

(ii) The Japanese farmer makes use of modern techniques of agriculture. But he does not make use of heavy machinery because :

- (a) The soil is soft and sandy.
- (b) The Japanese farmer is too poor to buy heavy machinery.
- (c) Mineral oil is not available in Japan to run these machines.
- (d) His holdings are small.
- (e) He is not technically minded to understand the working of heavy machinery.

(iii) The Japanese resort to terrace cultivation because :

- (a) They are lovers of beauty.
- (b) The bulk of the land is mountainous and uneven.
- (c) It enables the use of new and efficient machines.
- (d) They can easily supervise their farms.
- (e) Terrace cultivation brings in more profit.

(iv) Japan is one of the most advanced countries in the world because :

- (a) The Japanese consume a large quantity of fish which is supposed to make them intelligent.
- (b) The Japanese have a large merchant fleet and are able to go anywhere in the world.
- (c) The Japanese are very clever in making electronic goods which are sold all over the world.
- (d) The Japanese are resourceful, and hardworking people with a great capacity to adapt themselves.

3. Gopal is an Indian boy from a strict vegetarian home. Kazama is a Japanese boy belonging to a fisherman's family. Write an imaginary conversation between the two.

4. Give reasons for the following :

- (1) Japanese rivers are not fit for navigation.
- (2) There is often thick fog on the Japanese coast.

- (3) Though Japan is a monsoon land, typical trees of the monsoon forest like teak and Sal are not found.
 - (4) Japan has a large number of ports
 - (5) In Japan normally the soil is poor yet the Japanese farmer is able to get an yield three times that of India.
- V. Give the appropriate word or phrase for the following :
- (1) Fierce storms that strike the Japanese coast, and cause widespread havoc.
 - (2) A precious and costly thing that comes from Oysters
 - (3) The synthetic material that is very much used in the textile industry.
 - (4) The cold current that washes the north-eastern Japanese coast.
 - (5) An inexhaustible source from which electricity is widely produced.
6. Give a detailed account of Japanese agriculture stressing the ways in which it differs from our own.
 - 7 State and explain three most important factors that are responsible for making Japan the leading industrial nation of Asia.

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VII. China

I. OVERVIEW

Among the neighbouring countries of India, China is unique in the sense that being situated along the Himalayan borders and having a number of natural passes or gates, it forms the common boundary with India right from north-west to north-east. The valleys of China known from times immemorial for their being the home of the pre-historic man, now, are occupied nearly by half of the Asian peoples in only one fourth of the area of Asia. Today's China is, none the less, important economically. China's agriculture and her farmers have no parallel in the world except India. Their indigenous farming-practices and the care of the Mother Earth are responsible for the typical agrarian culture the Chinese possess. It is only recently that utilization of mineral resources including atomic and nuclear power and development of manufacturing industries have made her one of the Big Powers wielding considerable influence both within communist and non-communist blocks. Geography of the country is more so essential because in its background China's evergrowing population and her ambitious rulers have been following the path of neo-colonialism and expansionism which has shaken its very base and cultural roots. Social and political renaissance within the communist world itself as well as foreign influence are bringing about significant changes in the fabric of China which necessarily demand studying problems a really to strike the reality.

II. SPECIFIC OBJECTIVES OF TEACHING

A. *Acquisition of Knowledge*

The pupil

1. locates China's important physical features, towns ports, etc.
2. knows about physical and climatic divisions of China, important crops and minerals, concentrations of population

3. recognises China's boundary and the countries located around her
4. describes about the life of a Chinese farmer, silk weaver and camel herder.

B. Development of Understanding

The pupil develops understanding of the following major ideas:

1. China is a very vast country with rich agricultural, mineral and forest resources but she is industrially underdeveloped
2. She is mainly an agricultural country, and is the largest producer of rice and tea in the world.
3. She has the largest population in the world, almost one third of the total population of the world.
4. She is not in position to export much hence her contribution to world trade is very low.
5. Population is her biggest asset as well as a liability
6. Vast area of China is an arid table-land which it is hoped may be put to better use with the technological advancement of the country.
7. The present political situation in China is not very happy therefore we are not able to maintain a friendly relationship with this country.

C. Application of knowledge

The pupil

1. compares the life of a farmer in northern China with that of Punjab, of Central China with that of U.P., of southern China with that of Bengal.
2. cites examples from Chinese history and culture, similarities and difference with the cultural heritage of India
3. sees relationship between location of China and her climate, her climate and her agricultural products, her mineral wealth and industrial development, her agriculture and distribution of her population, line of communications and town sites.
4. hypothesizes about future of the industrial development of China.

D. Development of Skills

The pupil

1. draws major mountain ranges and rivers.
2. inserts important towns, ports, rail, road, sea and air routes.
3. depicts the distribution of agricultural produce and population.
4. prepares simple bar-diagrams to show imports and exports of China.

E. Development of Attitudes

The pupil

1. realises that unfriendly relations with political government of any country should not become the basis of unfriendly attitude towards the people of the country.
2. develops a sense of confidence in the ability of man to overcome the limitations of nature.
3. develops particular interest in the events taking place in the neighbouring countries

III. CONTENT

Position and Size : China is situated from 20°N to 50°N latitude and from 70°E to 141°E longitudes. It covers an area of 9437034 sq kilometres. China comprises of Manchuria, Inner Mongolia, Tibet, Sinkiang and the mainland. China is bounded by the great series of plateaus which constitute a part of Central Asia. In the east it is bounded by the Pacific Ocean.

Physical Features : The relief of land is mostly hilly. The mountains and plateaus roughly cover 70% of the total area of the country, 15% of the area is plain. The lowlands along the rivers stretch towards the pacific coast. The northern plain is bounded by the high Mongolian plateau. To the west also we find the high mountains. The knotty central Asian mountain ranges form a formidable barrier in the west. Apart from this the country can be divided into three main river basins. They are Hwang-Ho plain in the north, the Yangtze in the centre and Sikiang in the south. Between Hwang-ho and Yangtze lies the high ranges of Tsinlingshan, an eastern extension of the Kuenlun.

Hwangho Basin : The river Hwangho originates from Tibet and flows through narrow valleys. It passes through a narrow gorge before it reaches the plain. Hwangho means 'the yellow river'. It is so called because of the fine yellow silt which it deposits on plains. This makes it one of the most fertile and rich plains of the country. It also explains the dense population here. This river often floods and changes its course like the river Brahmaputra. The frequent destruction caused by this river has given it the name 'of sorrow of China'. Therefore, we do not find any towns along the banks of this river. It is also not navigable and therefore of not commercial value.

The great plain north of Hwang ho is blanketed by the numerous deposits of fine dust called loess, wind blown from middle Asia and deposited here from times immemorial. It is very friable in texture and the land is easily cultivable.

The Yangtze : The river is the sixth largest river in the world and is one of the greatest of the world's waterways. It rises in the Tibetan plateau and flows through very rugged country. Red basin found here is one of the remarkable natural regions. It is hemmed by a girdle of mountains and has only one outlet, that through which the river flows.

It is watered by four streams which flow into the basin of red sandstone which accounts for its name. It is one of the richest agricultural lands. The river is the gateway of the province to the outer world. Although it is full of gorges and rapids, boatmen have learned to traverse it with specially constructed boats.

East of this, the Yangtze begins to widen and many of its tributaries join it here. Two lakes 'Tung-Ting' and the 'Po-Yang' found here are the reservoirs of its flood waters and are in the course of the river. This part is called the central basin.

The Yangtze delta is a vast alluvial plain and a lowland and it is sometimes called the Holland of China. It is traversed by numerous canals which flow in all directions. The two important towns of China namely Nanking and Shanghai, are situated here. Shanghai is the largest town and the most important of China.

Sikiang Valley : South of the river Yangtze, the coast of China is very rugged. This barrier of hills which is traversed by numerous streams separates the coastal region from the Yangtze plain. The south-eastern coastal plain is joined by the valley of Sikiang and becomes much wider here.

This broad plain is fertile and on its estuary lies the city of Canton. The river rises in the highlands of Yunnan and is easily navigable to the borders of Yunnan. Hong Kong, a British colony established on a rocky island, has been an important commercial rival of Canton.

Climate : China is not shut off from the interior of Asia by any great chain of mountains. Hence in winter it gets very cold and suffers from icy winds of the cold interior and of the arctic regions. In January the northern half of China has a temperature below freezing point. By May the interior of Asia becomes warm and the monsoon commences.

From the south and south-west there are warm and moist winds which provide rain between May and September. There is distinct difference in the rainfall and temperatures between north China and Yangtze valley in the south coast. In the north dust storms are more frequent in winter and the growing season is so short that drought and famine occur frequently. In the Yangtze valley and in the south temperatures are mild. Dust storms do not occur. Growing season is longer and famines are less frequent. The floods that are so frequent in China are due to the monsoonal nature of the climate. The concentration of the rain in a few months leads to torrential rain and floods.

Northern China experiences cold winters and hot and wet summers, central China cool winters and hot, wet summers, and southern China warm winters and hot and wet Summers.

The rainfall in China varies from zero to 750 cms. in a year. Vast areas in the north and north-west get scanty rain. Southern China gets more than 125 cms. and northern China 50 cms. annually. Temperature in Shanghai in winter is 3°C and in June 27°C. Peking is below freezing in winter and 25°C in June.

Tropical cyclones called typhoons are prevalent in China. No part of the year is entirely free from typhoons, but they are more frequent during summer and they bring heavy rain. The rainfall is heavier in the South than in the North.

In North China rainfall occurs during summer, and winters have bright sunshine. In the south summer is wet but all the months have some rain.

Natural Vegetation : Natural Vegetation is still preserved in places where topography or climate prevent agricultural operations. In the north broad leaved deciduous forests are prevalent. In the Yangtze valley broad leaved ever-green forests replace deciduous trees. But deciduous and coniferous woods, though of a southern type persist on the higher ranges and sub-tropical trees like camphor-wood, teak and the bamboo grow in the river valleys.

The vegetation of China are divided into—1. cultivated river plains where vegetation has been cleared, 2. desert flora in which we find barren sands and salt tolerant plants, 3. steppe grass lands, 4. semi arid bushes, 5. dry mountain flora, 6. sub-tropical forest and tropical broad leaved forests, 7. upland forests in which oaks, and pines are found, 8. sezechuan lowland flora containing pine, bamboo and cypress, and high mountain flora forests where spruce, fir and pine are important trees.

Agriculture in China : China is a land of farmers and Chinese culture is a product of the soil. It is essentially an agricultural country. In few other large countries do people live so close to the mother earth and the density of rural population closely parallels the productivity of the land. In several places there are over 3,200 people per. sq kilometres, and the average density for the whole country in terms of cultivated land is 2737 people per sq. kilometres. Despite the greatest care distress and famine have often resulted from long winters, uncertain rain and the hazards due to changes in the courses of the river.

Chinese agriculture has had long and honoured history for at least 30 centuries. Farmers have been able to till the same fields. The patience and industry of the Chinese have become proverbial.

As one flies over, landscape everywhere reflects the intensity of man's quest for food. Wherever crops can be raised the land is under cultivation. River plains are divided into tiny geometric garden plots, while side fields wind along

the contours. Throughout the country there is super abundance of people and limited arable land

In a country so densely crowded as China there is little land that can be spared for pasture. Fish is an important part of the diet near the sea shore and in the canal areas.

Burk's survey has shown that China's agricultural problem is not one of excessive tenancy but that of the high interest rate and unsound economy which prevent a farmer from receiving an adequate return for his labour. Under the new regime it is said that 80% of the farm land is now worked on a cooperative basis. About 10% of the total area of the country is under cultivation. 3/4 of all cultivated land is occupied by three chief food grains i. e. rice, wheat and millet. Rice is the dominant and almost the sole crop in south China. In Central China rice and wheat share the primary position. In northern China there is little rice. It primarily grows wheat. In central China millets, kaoliang are grown wherever rainfall is less than 100 cms. soyabeans are grown along with millets. Soyabean is an important cereal crop of north and central China. Peas, maize and beans are produced in the north. Tea is one of the popular beverages here and much land is given to this. China is the largest producer of tea in the world. It is grown in south-east and central China and Shantung peninsula. Cotton, sugarcane and tobacco are widely grown in the Yangtze valley and south east China. Plantation of mulberry is carried on a wide scale in south and central China. Land not used for crops is planted with these trees. Silk worms are reared on these leaves and sericulture is the most important occupation of the Chinese farmer.

China possesses one fifth of the world population of swine. Most farmers raise hogs for manures, meat, lard, bristles etc., for local consumption and export. Ducks and geese are common in tanks, canals and lakes. Poultry are abundant and egg products are the leading items of export. Almost all kinds of animals available in the land are eaten to supplement the food-needs.

Thanks to the favourable conditions of climate, soil and water supply, the Szechuan province is intensively cultivated and is one of the most densely populated parts of China. Usually three or four crops a year are raised including rice, maize, wheat and tobacco. Though agriculture is the main

industry in some places yet one sixth of the whole land of China is left as burial grounds. The social customs of the people also act as a hindrance to the promotion of agriculture.

Minerals : China has extensive deposits of coal widely distributed but it is mined mostly in north and central China. China is deficient in iron and petroleum. Iron is found in many of its provinces but not in sufficient quantities or suitable forms to constitute the basis of a large industry. Main iron mining centres are in Manchuria (near Anshar) and in the central Yantze Basin east of Hankow. Petroleum is very limited. It is extracted in some places in the west and north-west.

In south China there is a great variety of minerals including tin, copper, lead, zinc, antimony, tungsten, mercury as well as iron. Most of the larger deposits of other ores are concentrated into two areas, the first around the Nauling mountains on the borders of Hunan; the second in eastern Yunnan and adjoining parts of Szechuan. The Shansi highlands are specially rich in both coal and iron. Mining also takes place in Shantung. The railway from Peking to Hankow passing along the eastern margins of the Shansi region helps the development of iron and steel manufacturing. The plains of northern China are practically treeless and coal serves as a cheap fuel and leads to the development of manufacturing. Considerable quantities of precious metals and copper are found along the margins of the Tibet plateau. China has important store of tungsten and antimony. She dominates the world market in these two minerals.

Industries : Development of industries is being taken up under five year plans. Hydroelectric projects are being taken up. Hydro-electricity is well developed in Manchuria where large industries have been established. Anshan in this region, is the biggest iron and steel and engineering goods manufacturing centre. Paoto in north is also an important industrial centre. Cotton Textile and silk industries are located in central China and Shantung. Other developing industries of China are paper, chemicals, cement, tractors, railway goods and automobile manufactures.

Transport : Transport has not developed much in China. Most of the roads were mere tracks of beaten earth but remarkable progress is being made now. New roads and railway lines are being built especially at the frontiers. In the north are used one wheeled wagons and carts drawn by animals. But in most parts of the country land transport is dependent upon pack animals. Manpower too is cheap in this densely populated land. Men move freight and passengers in wheel barrows covering hundreds of miles at a rate of about 30 miles a day. The inland waterways are provided by the rivers and their tributaries and the numerous canals which connect them. Now regular air services link the important towns. An internal coastal trade is maintained by ships and boats plying between coastal towns of China. The Yangtze is navigable by ocean going steamers for nearly 1280 kilometres. Railways are numerous in the east and they connect the northern cities with those of the Yangtze and Sikiang basins. Mukden (Shenyang) in Manchuria is connected with Trans-Siberian Railway. There are 33,000 kilometres of railways.

Important Cities : The most important city in northern China is Peking, the capital of China. It not only commands the route to Manchuria, now followed by a railway which connects it with the Trans-Siberian line, but also the route to Mongolia through the Pei Ho Valley.

Tientsin is the port for Peking and is the main outlet for the produce of northern China. The chief town in central China is Chengtu, the centre of a densely populated area of extraordinary fertility, famous for its garden cultivation. It is the capital of Szechuan.

Hankow is situated at the confluence of the Yangtze and the Han river. Near Hankow are two other towns and all the three together constitute the big city of Wuhan, which is the second largest city of China. Shanghai is situated on the Whangpooingon, the mouth of the delta of Yangtze. It is the biggest town of China and the most important port. Its manufacture include silk, woolen and cotton goods. It exports silk, tea, cotton and various poultry products.

Canton is the largest city in south-east China and a modern manufacturing town. It is the port for the rich Sikiang Valley.

Near the mouth of Canton river is the island of Hong Kong. The island is of great strategic and commercial importance. It is also the chief port of southern China and a distributing centre for islands in the west Pacific. The main exports are silk, tea and cotton. Hong Kong air port is a great junction for air traffic, with service to Europe, North America, Australia and neighbouring territories.

Population : I has been said with some force that estimates of the total population of China may be reasonably put at 60,00,00,000 but authorities differ vigorously as to whether it is under or over this figure. A good number believe that it has increased in the past ten decades. Particularly important is the extraordinarily uneven distribution and almost unparalleled density in certain large areas.

One of the two factors that control the distribution of population, is physical. Most of the population is concentrated below the 100 metre contour line. The other is religion Chinese believe in ancestral worship. This ties a family to the burial places hallowed by the predecessors and these hamper emigration and movement. But old customs are disappearing and Chinese are rapidly filling up the whole of Manchuria, and other rugged parts.

The People and their Civilisation . The features of China's traditional civilisation were developed 3,000 to 4,000 years ago in the basins of Hwang Ho and the Yangtze. She had developed a civilization completely independent of any extraneous influences. Throughout 19th century the European conception of the Chinese was of a people in changing and virtually unchanging. But now the impact of European culture has begun to penetrate to the very foundation of Chinese civilization and is bringing about many changes in the Chinese society.

IV. TEACHING HINTS

1. The teacher must be very particular in showing the exact boundary of China and her neighbours specially her boundary with India.
2. He may ask the pupils to study different maps of China and collect information about—
 - (i) the mountain ranges and peaks.
 - (ii) rivers and river valleys.

- (iii) climatic conditions in different parts of China
- (iv) distribution of agricultural produce and population.
- 3. He may ask them to prepare maps of China showing physical climatic and natural divisions.
- 4. He may help them to prepare a relief model of China
- 5. He may arrange group discussions on
 - (i) China old and new.
 - (ii) Life of a Chinese farmer as compared with that of an Indian farmer.
 - (iii) China and her population.
 - (iv) Agro-industries of China.
- 6. He may exhibit pictures showing the different aspects of life in China.
- 7. The agricultural products of China may be elicited with the help of temperature and rainfall maps, as also comparison with northern plains of India from Punjab to Bengal.
- 8. Divide the class into four groups and ask them to collect information about the following topics and put up on the bulletin board
 - (i) The Chinese civilization.
 - (ii) Rice cultivation in China.
 - (iii) Climate of China.
 - (iv) The importance of rivers to the Chinese life.
- 9. Collect pictures from magazines about China, classify them and prepare an album.
- 10. Imagine yourself as the son of a Chinese farmer who has a little piece of land in the central basin of the Yangtze. Write a letter to your friend in India how you would spend a day at his home

V EVALUATION

A. Ask the pupil to tabulate the following specimen given for Hwang-Ho.

River Basins	Climate	Relief features	Products
Hwang-Ho	Temperate, monsoon, winters dry and cold summer hot and rainy.	1. Wehio valley 2. Loess plain 3. Flood plain	Wheat, millets, barley, soya-beans.

1. Which is the chief foodstuff grown in North China ?
2. What are the three river basins in China ?
3. Differentiate the climate conditions of South China with that of North China
4. Give a detailed account of Chinese agriculture and how it differs from our own.
5. Draw a map of China showing the following :
 - (i) The important river basins.
 - (ii) Hong Kong.
 - (iii) The wheat producing area
 - (iv) The political capital of China.
 - (v) Yannon plateau.
6. Match the following :

A. Political capital	Nanking
B. A sea port	Canton
C. Industrial city	Anshan
D. Former capital	Peking
	Lhasa
	Kashgar
7. Complete the following statements by choosing a correct ending :
 - (i) Chinese do not migrate easily because
 - A. they do not have proper transport facilities.
 - B. they do not want to leave ancestral homes.
 - C. the holdings are small.
 - D. the government disapproves of it.
 - (ii) Frequent famines occur in the north because
 - A. the rains are uncertain.
 - B. growing season is short
 - C. the floods are frequent.
 - D. the river is not used for irrigation.
 - (iii) The Hwang-Ho is not navigable because
 - A. it changes its course frequently
 - B. it flows fast

- C. it forms a delta
- D. it is very shallow.

(iv) The principal export of China is

- A. sugar
- B. cotton
- C. silk
- D. wheat.

8. Answer the following :

- (i) Name the three river basins in China
- (ii) Name two important ports of China.
- (iii) What is loess ?
- (iv) Why is Szechwan called the granary of China.

VI. READING REFERENCES

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